A VANCOUVER FRUIT TREE PROJECT COLLABORATION

VANCOUVER FRUIT TREE HISTORIES & COMMUNITIES

WRITTEN BY

SYLVIA GRACE BORDA

VANCOUVER FRUIT TREE PROJECT

AND

COAST SALISH PLANT NURSERY

NORTH VANCOUVER, B.C. CANADA



Pacific Crabapple, Malus fusca. Vancouver. Photogram © 2022 by Sylvia Grace Borda



A Vancouver Fruit Tree Project Collaboration

Written by Sylvia Grace Borda, Vancouver Fruit Tree Project and Coast Salish Plant Nursery, North Vancouver, B.C. Canada

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FOREWORD

About the Vancouver Fruit Tree Project

https://www.vancouverfruittree.com

The Vancouver Fruit Tree Project (VFTP) is a grassroots organisation and registered charity focused on picking fruit from backyard trees in Vancouver with a dedicated team of volunteers and supported by outreach events and community partnerships. Volunteers are always welcome as are fruit tree owners to be part of our food collection services.

The key mission of VFTP is to strengthen Vancouver's food security by celebrating and distributing the bounty of our local fruit trees, reducing fruit waste, and cultivating community in our neighbourhoods. In the words of Marie Laitte, President of Vancouver Fruit Tree Project (2019-2022):

Food is more expensive than it has been for decades. In Canada, the price of store-bought food went up by four percent from October 2020 to 2021, and food prices are continually rising in 2022. Ensuring the less fortunate members of our communities can access the fresh and local fruit they can't afford in store has never been more important. At Vancouver Fruit Tree Project, we honour the bounty of our local orchard by sharing it with those who need it the most, creating a deep sense of connection to one another and the land. With dedicated support and generosity of our volunteers, tree owners, and supporters, we are making things happen. (VFTP Annual Report 2021, p. 2)

The VFTP has always been associated with a core mandate of supporting community education, learning, and exchange, which we hope this publication will also enhance. Incorporating different perspectives when talking about fruit tree histories is a way of bringing diverse communities together and reinforcing the VFTP mission and goals. The VFTP was founded on principles that link people and the environment to increase food security, reduce food waste, and create a working opportunity toward achieving sustainability and an understanding of the generations—First Nations peoples who came before us and settler communities; we are all here today and tomorrow.

Land Acknowledgement

The VFTP is based in the City of Vancouver, and acknowledges that it is located on the traditional, unceded territories of the x^wməθk^wəy əm (Musqueam), Skwxwú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) peoples, who have lived on these lands for time immemorial.

"Unceded" in this context refers to the lack of any treaties between the Crown and local Indigenous peoples. Neither was the land obtained by purchase or in the rules of war. Thus, the City of Vancouver and the Park Board operate jurisdiction over lands for which the Musqueam, Squamish, and Tsleil-Waututh peoples have title and rights. Vancouver and 95 per cent of B.C. are located on the unceded territories of First Nations. The term serves as a reminder that the Musqueam, Squamish, and Tsleil-Waututh peoples have never left their territories and will always retain jurisdiction over and relationships with their territories." City of Vancouver. Planning Vancouver Together: Vancouver Today – The City at a Glance, 2020.

First Nations peoples have never given up the rights to their land, and it should be noted both public and private land are also part of unceded territories. The City of Vancouver itself has become a large and still expanding metropolitan centre since the 1800s, developed largely by settler communities which have significantly shifted the original land use. The urban planning expansions on land and along the Vancouver coastline, and continual drive to increase population density, are creating continual demands and changes to the common bonds between people, food, and place.

Partnerships

This publication is the work of joint organisations, writers, and knowledge holders, whilst undertaking due care and diligence by acknowledging and supporting Indigenous ways of life—knowing, being, and doing in a respectful manner that can be shared. It is hoped that through this publication and through learning about the Pacific Northwest's only native fruit, the Pacific crabapple (Malus fusca), the Indigenous histories interwoven with the city of Vancouver's planning and settlement can offer a place from which to start to become aware of shared connections and opportunities for knowledge sharing.

The Coast Salish Plant Nursery is a key intercultural collaborator in this project. Members of the nursery have extended the research in this publication through cultural learning in partnership with Indigenous communities. This collaboration aims to enliven archived collections by making and doing and finding new ways to support Indigenous knowledge and stories. Our partners are actively engaged in seeking to preserve, access, and revitalise Indigenous culture and heritage that can enable communities to understand the importance of intercultural learning and Indigenous knowledge. Indigenous knowledge holders are experts on their culture and have been asked to contribute directly to this publication.

About the Coast Salish Plant Nursery

http://wildbirdtrust.org/coast-salish-plant-nursery

The Coast Salish Plant Nursery—situated at Maplewood Flats and residing on Tsleil-Waututh territory—offers the widest range of native plants in a retail setting anywhere in the Lower Mainland; the seeds and plants found at the nursery are rarely available at conventional garden centres.

Though the nursery has been open since 1993 with the restoration of the site, it's grown significantly in the past five years. Maplewood Flats has long been working to incorporate awareness of the plant species on site and their traditional uses. With time, the nursery's selection will expand to offer all the perennials, ground covers, shrubs, and trees native to the Maplewood Flats area.

As Maplewood Flats moves forward in reconciliation through conservation with an emphasis on the cultural associations of the plants, the nursery has included a wide range of edible, medicinal, craft-associated, restoration-specific, and pollinator-friendly selections. The nursery's local ethnobotanists, volunteers, and staff team continues to grow and we've had a ton of fun sharing our plant knowledge and assisting visitors with plant and seed selection.

Operating as a social enterprise, all of the nursery's gains are returned to the land and community through restoration and reconciliation-focused programming and activities. The nursery is stocked with easy-growers, but stretches to include more daring selections, such as Chocolate Lily (*Fritillaria lanceolata*) and Devil's Club (*Oplapanax horridus*). The nursery's selection of native plant seeds continues to expand, including function-specific blends for medicinals, human uses, and pollinators.

Choosing native plants over non-native species benefits both the garden and the gardener: native plants are locally adapted and thus require less time, effort, and water. Further, they provide important habitat that local birds and other wildlife depend on. The nursery also supplies information sheets describing proper plant placement and care, ecological information, and traditional uses.

Beyond the hard work the nursery staff have put into curating seed and plant selections, they're also dedicated to education and providing community opportunities. Some of the nursery's recent events include our annual Osprey Festival, a way for visitors to learn about reconciliation with the Tsleil-Waututh community while listening to music, poetry, and ornithology talks, and our Tree Day—partnered with the District of North Vancouver's Urban Tree Canopy Project—an afternoon of plant walks, fun food, and free trees to participants. Beyond this, the nursery offers weekly plant walks on Saturdays dedicated to exploring and learning more about Indigenous plants on the Maplewood Flats site.

The nursery serves a wide range of people and groups, including landscapers, organizations, schools, businesses, and community groups. New volunteers in the nursery are always welcome.

See: City of Vancouver. *Planning Vancouver Together: Vancouver Today – The City at a Glance*, 2020. https://vancouverplan.ca/wp-content/uploads/Vancouver-Today-the-City-at-a-Glance-2020-03-16-FINAL.pdf

First Nations' websites:

http://musqueam.bc.ca/

http://squamish.net/

http://twnation.ca/

Musqueam Place Names Map:

http://musqueam.bc.ca/our-story/musqueamterritory/place-names-map

Squamish Atlas: http://squamishatlas.com

VANCOUVER FRUIT HISTORIES

Fruit Cultivation by First Nations

Coast Salish peoples have lived since time immemorial on these lands and waters, with intimate knowledge of their flora, fauna, and seasonal foods. Indigenous communities across the globe have remained stewards of their lands for thousands of years developing complex food systems tied to stewardship practices. Due to terra nullius and Western science bias these stewardship practices were usually ignored and made illegal by colonizers.

Here in what is referred to as the City of Vancouver, the x^wməθk^wəý əm (Musqueam), Skwxwú7mesh (Squamish) and səlilwətał (Tsleil-Waututh) peoples avoided diminishing their lands and waters and were responsible for assisting in the cultivation and production of versatile forest and sea gardens. These ideas are well articulated in contemporary media with Carleen Thomas of the Tsleil-Waututh Nation, describing "when the tide goes out, the table is set," an adage first attributed to the Tlingit people of B.C., the Yukon, and Alaska. (Popkik, B. (2012, August 9). When the Tide Goes Out, the Table is Set).

In the most recent Strategic Plan by the Squamish Nation (2022), the nation writes:

S7ulh Skwx ú7mesh nilh ti temíxw iyta stakw wa nánam' cht yelxálhem. S7ulh iyá wa lh7na kwis cht emút. Nilh wes timáswit ti syétsem íytsi kwekwíń selsi7lcht.

This land and water belong to the Squamish. We have our places we go to gather food. We have our places where we reside. That's the way the old people of long ago described this.

Our ancestors, culture, language, and history are all part of this land. We have always practiced our inherent rights and respected our home. (Squamish Nation Strategic Plan 2022-26, p. 29)

The Coast Salish peoples have long stewarded the lands and waters of the nation, including the cultivation of trees and other plants settlers began growing when they came to the land. Coast Salish peoples'

care of and respect for the land is nothing new; neither was the production of the Pacific crabapple when settler farmers started growing them. It is the Coast Salish nation who first stewarded the Pacific crabapple—and many other native plants in the lower mainland—maintaining them, and therefore making them available to settlers arriving in the area.

Heritage Fruit Trees

As the effects of climate change intensify and there is increasing urban densification, more attention is being put on heritage plants and trees as a way to restore genetic diversity and feed a growing population while safeguarding the more unique food supplies of diverse regions. Typically, heritage plants and trees are defined as a variety that has since gone out of commercial production or can be traced to early plantings more than fifty to one hundred or more years ago. Specific heritage plants are often selected, saved, and planted again because of their superior performance in a particular growing location.

Indigenous knowledge holders have been the main stewards of plants and trees which can be traced back several hundred years. Not surprisingly, up to the early 20th century, the diversity of plants and trees was much more extensive than today as can be referenced, for example, in old nursery catalogues and seed catalogues. Since World War II, agriculture in industrialized and settler regions often consisted of food crops grown in larger monoculture plots. In order to maximize efficiency, fewer varieties of crops are grown, selected for their productivity and ability to ripen at the same time and hardiness to mechanical picking and cross-country shipping. These mass forms of agriculture have led to a drop in crop genetic diversity and to less cultivation of heritage fruit trees.

Does Vancouver Have a Native Fruit Tree?

Settlers may recognise one native fruit tree found in the City of Vancouver—Malus fusca (Latin), also known as Pacific crabapple (English). Coast Salish peoples had their own names; these names depend on each nation. For example, the Gitga'at Ts'msyen people call the apples moolks, the Haida people call them k'ay, Kwakwak'wakw people tsalxw., Squamish people, $we7\acute{u}p$ and Tsleil-Waututh and Musqueam people, $q^wa7\acute{a}p$.

The bias in taxonomy that defines the subject of this book is perhaps an issue we must confront before we go further. As we define fruit trees as a tall plant with a single dominant trunk, we have excluded the five to fifteen metre tall plants that have been stewarded in "Vancouver" since time out of mind. These include choke cherry, hazelnut, Indian plum, soapberry, Saskatoon berry, and black hawthorn, which have provided fruit to Coast Salish people for millennia before fruit trees became a staple of a market economy or industrialized food production.

Jess Housty, mother, writer, and community organizer of the Haíłzaqv (Heiltsuk) Nation says Western science's categorical nature doesn't take into account Heiltsuk's relational nature or other First Nations names. In doing so, Western taxonomy's categorization completely misses plants stewarded by and of great importance to Coast Salish peoples. Significant erasure of place-based Indigenous Knowledge occurs because of the taxonomy of excluding millennia of local fruit production simply because it is not held up by a proverbial colonial trunk.

Salish fruit tree species of the Gulf & San Juan Islands, Gordon Brent Brochu-Ingram

Around the Salish Sea, there were more than six native tree species that have been harvested and often carefully cultivated and stewarded for fruit, technology, and medicine. These orchards and respective cultivation practices span a rich set of Salish communities and languages. By "fruit tree," we describe a relatively small deciduous tree that has been maintained by families and communities. With heights ranging from a metre and a half to three metres, these trees were often kept low in order to stimulate fruit production and allow for ease of picking (and more often through shaking with sticks). For some Salish fruit species, cultures, and sites, orchards were maintained through planting of seed, transplanting, pruning, and light burning.

Pacific crabapple (English)
we7úp (Squamish)
qwə7áp (Tsleil-Waututh and Musqueam)
Malus fusca (Latin)

Source: Wild Bird Trust of BC, "Coast Salish plants", Wingspan. 2020, p. 31. https://wildbirdtrust.org/wp-content/uploads/2021/02/Wingspan-FW-2020.pdf

Of all the fruit trees around the Salish Sea, this Indigenous crabapple produced the most food and provided crucial amounts of carbohydrates and vitamins. Crabapples were eaten raw and preserved in water or eulachon oil in cedar boxes. And of the five Indigenous North American apples, only Malus fusca, is in the primary gene pool of the cultivated, Eurasian apple. Malus fusca grows near the coast of the North Pacific from central California to Russia's Kamchatka Peninsula and possibly to Hokkaido. Nancy Turner (Turner, 2014, p. 59, 65) went as far as suggesting that this species was spread by early human migrants and consistently collected information from informants confirming that crabapple "[t]rees [were] tended pruned, lopped, and transplanted." (Turner, 2014, p. 189).

Perhaps more than any of the other native fruit tree species around the Salish Sea, crabapple trees were "owned" (Turner, 2014, p. 189), often passing from mother to daughter. And in some Northwest coast Indigenous cultures, Pacific crabapple was considered a particularly powerful plant central to a complex conception of transformative twigs (as in the cuttings and vegetative propagation so central to Salish horticulture) leading to magical expansions of life into entire ecosystems for human benefit (Turner, 2014, p. 344). In turn, crabapple orchards or "gardens" were often well maintained and pruned.

Chokecherry, Prunus virginiana

This species of cherry tree is native to every province and territory in Canada. This particular cherry is relatively rare on the Pacific coast, largely confined to the Salish Sea. Along the Pacific coast, from Salt Spring Island southward, this species is associated with better-watered sites in Garry oak woodlands and savannahs, with this species, though perhaps a different subspecies, reappearing again near marine shorelines in Mendocino County, California.

This, the most bountiful of the cherries of northwestern North America, has close Eurasian relatives extending to Western Europe. Around the Salish Sea, chokecherry were widely harvested, traded (Turner, 2014, p. 124), and tended (Turner, 2014, p. 189). Chokecherry bark was a crucial ingredient in a number of medicinal decoctions (Turner, 2014, p. 437). Distinct varieties of this species were recognized by some Salish communities. So far, the specimens recorded around the Salish Sea have been consistent with the Northwest coast subspecies, *Prunus virginiana* ssp. *demissa*.

Bitter cherry, Prunus emarginata

"The fruit of this 'bitter cherry' tree was not widely harvested but its wood was prized for knife handles and its bark was crucial for basket weaving" (Turner, 2014, p. 124).

This species has a markedly different physiology and ecology compared to the far more common chokecherry. Occurring in more shaded edges than chokecherry, this species tends to produce less fruit. And while chokecherry leaves often yellow and drop soon after fruiting in the first half of August, bitter cherry leaves (twice the size of chokecherry leaves) stay lush.

Two species of black hawthorn

On the Gulf and San Juan Islands and other areas around the Salish Sea, there are two distinct species of black hawthorn: *Crataegus douglasii* var. *douglasii* and *Crataegus douglasii* var. *suksdorfii*, the second of which is often considered a separate species in the United States, as *Crataegus suksdorfii*.

First Nations around the Salish Sea harvested the fruit and stewarded two species of black hawthorn (Turner, 2014, p. 272). "The dry sweetish fruits were eaten by the Island Salish groups, usually in the early fall. The Songhees ate them with salmon roe" (Boas, 1890).

Crataegus douglasii var. douglasii is more often associated with the mainland and interior of British Columbia, occurring more often as a large shrub with some tree forms on the Gulf Islands. In contrast, the island subspecies or species of black hawthorn, Crataegus douglasii var. suksdorfii (with a distribution more centred on the coast), is often in a taller, tree form. The label Crataegus douglasii var. suksdorfii corresponds to a species identified in the United States, including for the San Juan Islands, as Crataegus suksdorfii, differentiated as a distinct species because "It is diploid versus tetraploid for Crataegus douglasii." As well as subtle but consistent differences in the leaves of these two black hawthorn species, a simple differentiation can be made by examining the centre of a blossom. The flowers of "Variation douglasii" nearly always have 10 stamens with ovaries that are more often hairy whereas the flowers of "Variation suksdorfii" have 20 stamens and the ovaries are usually smooth.

California hazelnut, Corylus cornuta var. californica

California hazelnuts occur near the West coast of North America, from California to Alaska, and are closely related to Eurasian hazelnut species that occur as far west as northwestern Spain. Within the populations on the Northwest coast of North America, there were two subspecies. The involucral "beaks" attached to the nuts of *Corylus cornuta* var. *cornuta* are twice as long as the actual fruit/nut. In contrast, *Corylus cornuta* var. *california* fruit are attached to involucral beaks that are half that length and roughly the diameter of the sometimes larger fruit (that *might* be the result of Indigenous domestication, stewardship, and ecosystem management).

Hazelnut was transplanted on the B.C. coast (Turner, 2014, p. 203 – 204) and groves were sometimes managed through burning (Turner, 2014, p. 198). Hazelnut trees were sometimes transplanted (Turner, 2014, p. 365). There are records of historical orchards in northern areas such as the lower Skeena Valley that well into the twentieth century were defended by First Nations who asserted dietary dependence, ownership, and stewardship. Around the Salish Sea, records of significant groves are near Indigenous settlements and historic population centres. On the Gulf Islands, a significant record of "wild hazelnut" was around Beaver Point Hall on Salt Spring Island just above the mixed Tsawout, Saanich, and Cowichan village on the island's southeast shore.

Along with chokecherry, two other species are common in many interior regions of British Columbia and further East in Canada, and are thought to have been more common around the Salish Sea before 5,000 B.P.

Saskatoon berry, Amelanchier alnifolia

The saskatoon berry was transplanted by some First Nations in the region as late as the early 20th century (Turner, 2014, p. 203 – 204).

Soapberry, Shepherdia canadensis

Soapberry is thought to have been more common on the coast and more important dietarily than it is now (Turner, 2014, p. 140 – 144). Along the coast and in the interior, soapberry patches were "maintained by landscape burning, bushes pruned, berries scattered" and "occasionally transplanted" (Turner, 2014, p. 191).

Circumpolar Eurasian hybrids

All of the Salish fruit tree species, aside from Saskatoon berry and soap-berry, are part of circumpolar gene pools with millennia of relationships with human beings and domestication processes—on both sides of Beringia. But there are some distinct differences between each side of the North Pacific. Nearly all of the petals of the Eurasian domes-ticates are one and a half to twice the size of the North American species. Another general difference between "wild," traditionally stewarded, Indigenous, North American, and domesticated and Eurasian—primarily north-western Europe—sides of those gene pools is this simple dichotomy: aside from the island species of black hawthorn, *Crataegus douglasii* var. suksdorfii and *Crataegus suksdorfii*, which blossoms simultaneously with slow leafing, the North American native fruit trees nearly always leaf out a week or two before blossoming, while the Eurasian domesticates nearly always produce blossoms before they leaf out.

On the Gulf Islands there are circumpolar hybrids where blossoming and leafing are more simultaneous, such as a probable hybrid of native bitter cherry, *Prunus emarginata*, and introduced, northwestern European blackthorn or sloe, *Prunus spinosa*, that began reproducing on Salt Spring Island without cultivation starting in the twentieth century. With this blackthorn, blossoms and fruit begin with a double cluster several inches from the end of each branch, like bitter cherry, with petals large like a European domesticate, and blossoming and leafing relatively simultaneously.

Pacific crabapple as a traditional food

In B.C., the oldest apple species is the Pacific crabapple, a popular native apple found across the Pacific West coast from Alaska to California. Pacific crabapples thrive along the B.C. coast as well as in some inland areas of our province. This fruit tree is capable of growing in difficult conditions across most vegetation types, such as moist woods and at the edges of wetlands and estuaries. These trees are tolerant of water-logged conditions, and their root systems can remarkably withstand exposure to sea or salt water.

For thousands of years, coastal Indigenous peoples have and continue to tend and harvest Pacific crabapple trees. Such trees are planted and cared for as part of Indigenous food forests, gardens in tree-dense areas which were cultivated and sustained by Indigenous communities before the arrival of settlers. Indigenous peoples respect the Pacific crabapple as being an important part of family, food, medicine, and shelter. The bark remains important today with Indigenous peoples continuing to use it as an aid in the treatment of digestive disorders, as an eyewash, and/or for the treatment of external wounds and cuts. Tree limbs also continue to be harvested for making tools.



Fig. 1. Pacific crabapple fruiting in October. Photograph by ©Sylvia Grace Borda, 2022.

Please respect the use of Pacific crabapples for Indigenous communities and do not harvest these plants (from common lands), particularly if you are lacking in experience in traditional food and medicine knowledge. Such Indigenous management and understanding of cyclic growing seasons of flora and fauna created a wealth of natural resources for First Nations communities across B.C. and in the Metro Vancouver area.

Pacific crabapple fruit can be consumed raw, but become softer and more robustly coloured and sweeter some time after harvest. Of note, Pacific crabapples have enough pectin to self-set and make their own jellies. Pacific crabapple trees have clusters of attractive and fragrant blossoms through April and May. The tree is popular with landscape architects and planners since the tree is slow growing, has a compact canopy, and is very showy with its spring blossoms. Pacific crabapples were planted in large quantities in the 1960 and '70s along Vancouver boulevards. Even at present, many new development projects continue to use Pacific crabapple trees as part of landscape planning, given how resilient this plant is: it can grow in extremely poor and bog-ridden soils where other similar sized trees would fail to thrive. Note that Pacific crabapples, like other apple species, have a small amount of cyanide in them, a toxin that can cause injury if consumed. So, harvest times must be properly understood and supported by expert knowledge holders (see Indigenous custodianship).

Pacific crabapple fruits start to ripen in August and September and can be found maturing on the tree even through winter. This long maturing process of the fruit, gaining further sweetness and ripeness, means the fruit is an excellent winter food source for birds, deer, and other small mammals. Please enjoy seeing this tree in bloom in the city and in sharing its story as B.C.'s only coastal and native apple species.

Pacific Crabapple Resources:

Malus Fusca https://www.centralcoastbiodiversity.org/pacific-crab-apple-bull-malus-fusca.html

Charlie, L.A. & Turner, N. J. (2021). Luschiim's Plants: Traditional Indigenous Foods, Materials and Medicines. Madeira Park, B.C.: Harbour Publishing.

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Pacific Crabapple (Malus Fusca). In: Fretwell, K and Starzomski, B. Central Coast Biodiversity. Environmental Studies, University of Victoria, B.C. Available at: https://www.centralcoastbiodiversity.org/pacific-crab-apple-bull-malus-fusca.html

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Saanich. [n.d.] Recommended Native Plants for Restoring a Riparian Area in Saanich. Available at: https://www.saanich.ca/assets/Community/Documents/Rec-ommended%20Native%20Plants%20for%20Riparian%20Area.pdf

Turner, N. J. (1995). Food Plants of Coastal First Peoples. [Second edition]. Vancouver: UBC Press. 164 p. Wild Bird Trust of B.C., "Coast Salish plants", Wingspan. 2020, p. 31. https://wildbirdtrust.org/wp-content/uploads/2021/02/Wingspan-FW-2020.pdf

SETTLER COMMUNITIES AND LAND DEVELOPMENT

As a brief introduction—and not as a detailed history of Vancouver's development—settlement started in the mid-1800s. People came to Vancouver as the well-preserved natural resources (maintained by Indigenous communities—though not recognised even until recently) were seen as highly attractive and lucrative to incoming communities in terms of economic benefits.

Encouraged by the abundance and variety of resources, settlers harvested—or in many cases over-exploited—timber, gravel, and fish on the Southwest coast of B.C., thus, changing the local landscapes irrevocably from vibrant ecosystems to quickly cleared lots used for settlement. With the removal of forests and brush, settlers used wood from the land to build their own homes.



Fig. 2. A team of oxen on a skid road in Oben's Camp in the West End, Vancouver, B.C., 1889 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Str P342.



Fig. 3. Angus Fraser's House, N.W. corner of Cordova and Carrall Streets, Vancouver, 1877 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-:Bu P28.



Fig. 4. Brock, J.A. Huge log near the corner of Georgia and Seymour Streets, Vancouver, 1886. [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Tr P13.

With the arrival of timber merchants and the establishments of sawmills, trees were felled and wood processed to be used both for the local housing market but mainly as timber for international markets.

A steady supply of readily available and affordable wood from the local sawmills fueled the city's own emerging housing market. Many settler buildings were constructed near Vancouver's Bayshore areas and close to the sawmills. The proximity of working men increased efficiencies and reduced the initial need to build large civic infrastructure such as roads and other amenities. The position of the

mills around the inlets was also ideal in helping to ship timber quickly to other markets. Wharves increased the capacity and ability to export timber resources to other communities.



Fig. 5. Spencer Residence, 1257 Barclay Street, West End, Vancouver, 1895 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-2-: CVA 371-740. N.B. Notice the family watering the lawn and the foundation planting around the perimeter of the dwelling.

Initially, many Coast Salish peoples continued to inhabit their traditional villages, but as settlements grew, the new residents forced Indigenous communities away from and off their traditional lands. Coast Salish communities near Stanley Park and the Fraser River inlet were forcibly removed by the closure of the 19th century.



Fig. 6. Deville, Edouard Gaston Daniel, 1849-1924. Indigenous Coast Salish Village, Coal Harbour, 1886 [Photograph]. Copyright Royal BC Museum and Archives, Item D-04724.

While settler families were encouraged to come settle in the town of Vancouver, by the 1870s the town shifted from being a pub-driven community of labouring men (foresters) to a township of citizens and family groups that had access to churches, stores, railways, and emerging past times at the seaside and at Stanley Park. Indigenous peoples were constantly moved along to new settlements and into

reserves, their traditional access to lands, economies, resources, and pursuits disrupted while the city grew. When the city built and incorporated streets, churches, and shops, rows of affluent and working-class residential neighbourhoods emerged; Indigenous communities were not part of the dialogue or the emerging and developing city. Vancouver's earliest commercial or settler markets were built on concepts of settlement and export trade; the Indigenous way of life of sustainability of lands was left out of the planning process.



Fig. 7. First Nations peoples camped on Alexander Street beach at foot of Columbia Street, 1898 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: IN N12.

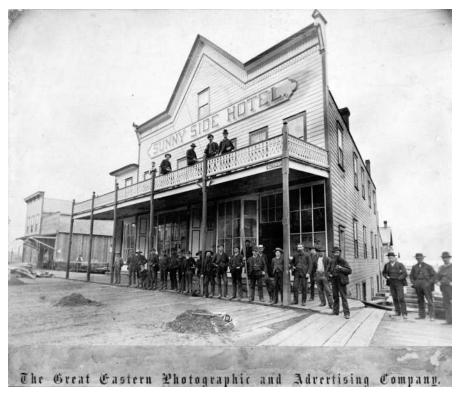


Fig. 8. 1 Water Street, Labouring men living in boarding rooms at Sunny Side Hotel. Photograph by The Great Eastern Photographic and Advertising Company, 1888. City of Vancouver Archives: Major Matthews Collection. AM54-S4-: Bu P371.

McCleery Farm, Dairy, and Orchard, 1862

The demand for fresh dairy products to be produced locally was considered paramount for the food security success of the province. The *Vancouver Trade Commission report of 1895-1896* reflected on this urgent need and how it might be alleviated.

(p. 89) "British Columbia has been and is paying high prices for creamery butter, etc., imported from the North West and elsewhere at considerable inconvenience and expense, when as a matter of fact, it is estimated that even the present small percentage of agricultural lands under cultivation and favourable to dairying, if cultivated in a proper and methodical manner, would prove .quite sufficient to supply the present wants of the Province in that respect."

(p. 94) "reduced (land) holdings (held by single prospectors or speculators and re-assigned as small land holdings), improved methods of farming and increased facilities of transportation, together with cooperation and the introduction of creameries, cheese factories, etc., would all tend to improve the agricultural interests of this Province, and in combination with the development of the country's great mineral wealth and the expansion of our lumber business would attract immigration, and thereby most readily inaugurate an era of agricultural prosperity."

One of the agricultural settler families in Vancouver, Irish brothers Fitzgerald and Samuel McCleery, understood the early need of fresh products even before the City of Vancouver was inaugurated in 1886. What would become a central part of the city was at the time known as the Granville townsite. It included the now-Gastown area and the Hastings Sawmill.

From their experiences in coming to the Pacific Coast of the Dominion of Canada, the brothers understood the need for the emerging townsite residents and workers of what would become Vancouver (1886) to have access to fresh food and dairy. The two set up their farming and agricultural business in spring 1863 after acquiring district lots 315 and 316. These lots formed part of SW Marine Drive from Macdonald Street to approximately Angus Drive and were bordered by the Fraser River from a good portion of what we now know as the Southlands area of Vancouver. This area was also an important part of the Musqueam nation's food harvesting areas and trails, and was not considered by the brothers or the city in terms of development.



Fig. 9. McCleery Farm (with fruit orchards), 1900s [Photograph]. City of Vancouver Archives: Dunbar History Project, AM1533-S2-4-: 2009-005.649.

The opportunity to address the lack of local dairy and poultry sources, and to feed emerging provincial towns, was why the McCleerys first bought and imported livestock dairy from Oregon to Vancouver. With the arrival of dairy cows, the brothers quickly started shipping milk and butter by canoe up the Fraser River to New Westminster, then the provincial capital.

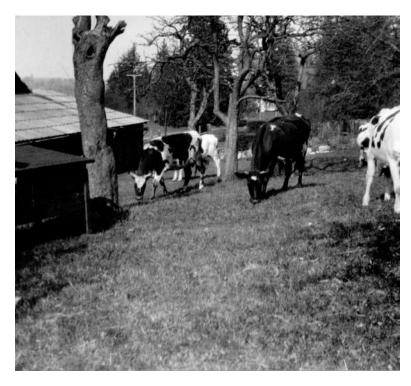


Fig. 10. Cattle at the McCleery Farm, 1930s [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-2-: CVA 371-2917.

In due course, the McCleery brothers were commissioned by the city in establishing the only trading route between New Westminster and Southlands—North Arm Trail—by clearing all the land of brush and trees; their clearing work forms what is now Marine Drive. The brothers also worked on establishing another trade and transportation route, Magee Road (1902), renamed West 49th Avenue, which was intended to connect Southlands to the urban areas of Vancouver.

The McCleery farm was held by the family until the 1950s and was eventually sold to the Vancouver Parks Board to help establish a civic golf course—McCleery golf course. In 1971, part of this land was used to establish the Fraser River Park at Angus Drive and West 75th Avenue. The Vancouver Parks Board re-planted crabapple trees and Nootka roses that farmers of the area once planted along the Fraser River dykes to protect their land from flooding—a practice originally used by First Nations land managers for hundreds of years.

To date, Southlands remains the only land within the City of Vancouver that forms part of the Agricultural Land Reserve (ALR).

Sources: Vancouver Trade Commission report of 1895-1896. https://open.library.ubc.ca/collections/bcbooks/ items/1.0222456

Southlands History. https://liveatsouthlands.com/history/#history2

McCleery Golf House Society. (2019, March7). McCleery Golf Course celebrates its 60th Anniversary. http://www.bcgolfhouse.com/mccleery-golf-course-celebrates-60th-anniversary

WHAT IS A TREE WORTH?



Fig. 11. Western Red Cedar, Brooks-Scanlon-O'Brien Company Limited (Example of logging practices), 1924. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Log P45.

How can one measure the value of something that takes years to grow and is integral to an ecological system? This question wasn't a concern historically when an understanding of tree species and endangered plants or animals might be impacted by climate change. First Nations peoples continue to raise awareness and tackle the harmful effects of logging on the land and mitigate using traditional knowledge.

From the late 1800s, trees of any scale in Vancouver were worth something to those who were building their homes on tree lots in the city. Trees were either felled and timbered for homes or as an energy resource as fuel. In these days of settler expansion, before the establishment of parks and forests, trees were owned by private hands and were often sawn or axed.

The sheer expense of transporting cut lumber made impractical the movement of trees across great distances, so homeowner settlers needed to do what they could in order to clear their land for homes.

Trees near Vancouver's waterfront areas were part of ongoing city commodification—they could be moved and floated to sawmills for a profit. But logging was dangerous work: accidents were frequent and injuries common. Logging a single Douglas Fir tree could require a full team of men over a week's worth of work, twelve hours a day, six days a week. Each logger earned between \$1.50 and \$2.50 a day, and there were no unions, no compensation laws, and few safety regulations. In the end, both the logging companies and many old growth trees in the City of Vancouver were brought to ruin.

So, what is a tree worth? There's one thing we know for sure: our valuing of trees has shifted more toward conservation practices and a deeper understanding of the role of trees in climate change mitigation. But we have a long way to go to restore what is needed to make the city sustainable again with old tree growth. The establishment of Stanley Park in 1888 was an early effort of preserving old growth forest from urban developments; however,

it is only in recent times that the land has been recognised as originally settled and used by Coast Salish peoples for thousands of years and protected by them for future generations.

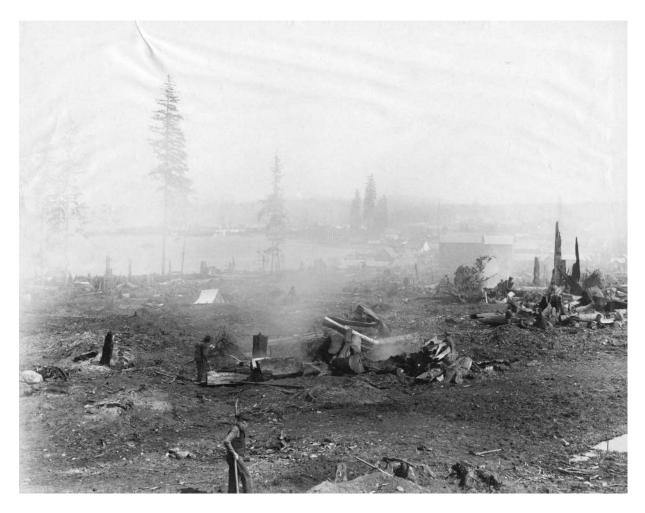


Fig. 12. Clearing land at the location of Hastings and Seymour Street, Vancouver, 1886. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Str P202.

Sources: Prices and Wages. https://libraryguides.missouri.edu/pricesandwages/1850-1859

More about Indigenous and First Nations histories and sovereignty of land:

B.C. Treaty Commission. Aboriginal Rights: https://www.bctreaty.ca/aboriginal-rights

Land and Rights. Indigenous Foundations (UBC). https://indigenousfoundations.arts.ubc.ca/land-rights/

Government of Canada – Culture. Additional Resources about Indigenous Peoples. https://www.rcaanc-cirnac.gc.ca/eng/1559222623218/1559222644174

City of Vancouver and Fruit Imports

The City of Vancouver was inaugurated in 1886 and started largely as an importer of fruit and produce. Early trade reports gave an indication of the extent of the imports.

According to the Vancouver Trade Commission Annual Report for 1895-1896:

"Large quantities of fruit continue to be imported which could be grown in British Columbia, but as increasing attention is now being paid to fruit cultivation, and the best methods of marketing, it is to be hoped this will be remedied before long."

This trade report, among others, tabulated the amount of goods imported in the province, which includes canned fruit, jams, jellies and dried fruit.

The province as a whole, like the City of Vancouver, was reliant on imports coming through the ports and by rail, such as through the Canadian Pacific Railway, which was completed in 1885. A good portion of these foodstuffs were also sustaining other growing urban areas, such as Moodyville, Vancouver, Victoria, and Nanaimo.

The provincial tally for the year 1892 represents substantial import figures:

"Apples, dried, 6,353 lbs tonnes other, dried 19,200 lbs tonnes Plums and Prunes 8,961 lbs tonnes"

There was a huge push by the Dominion (national government) and the province to encourage farming and the establishment of the fruiting industries in the interior. The Okanagan valley's developments in establishing agri-cultural land and fruit orchard industries was impactful for the region and province, and benefited from the establishment of the B.C. Fruit Grower's Association in 1889. However, the change in the availability of locally grown produce in the early 1900s would also irrevocably bring disruptions to Indigenous land and sovereignty through settlements, farming, and railways.

Settler Introduction of Fruit Trees

The arrival of the Canadian Pacific Railway came to the West in 1886 at the time of the incorporation of Vancouver as a city. The railways accelerated a desire for settlers to balance jobs, support colonial families, and distribute goods through the rail and shipping network to both local and foreign markets.

Vancouver's ports and rail network enabled the city to survive on the steady stream of goods coming into it. As a result, there was a diminished need for the city to sustain itself. Woodward's department store was established in 1892 and had a complete food floor where local foods from B.C. and the prairies could be purchased. In addition, British home goods such as jams, sauces, pectins, and canned meats, as well as exotic fruits such as pineapple, could also be bought on the average family's working wage. The need to grow one's own food was now less important in Vancouver where an abundance of corner stores sold pantry goods as well as fruits and vegetables than in somewhere with fewer grocer amenity shops beyond the city's limits. For example, in 1902, Peter Lawson owned lands in the North Shore that would become today's Gleneagles Golf Course and Clubhouse. Lawson specifically planted orchard trees from apples to cherries. Another North Shore family, the Spencers, maintained orchards, market gardens, and greenhouses—their excess vegetables and fruits were sold in Vancouver.

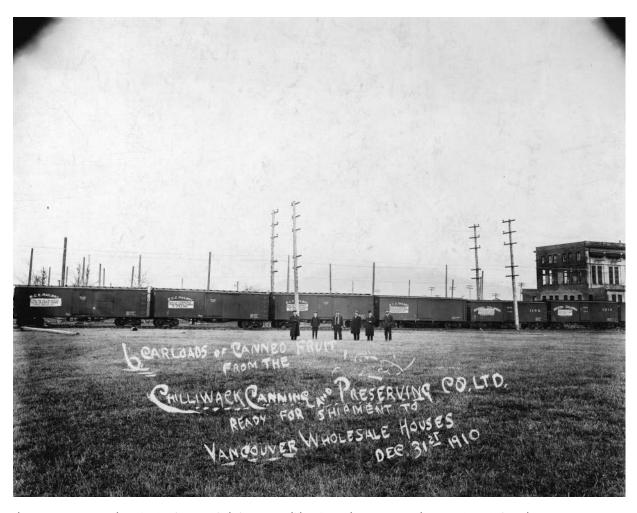


Fig. 13. Chapman, G.F. Six carloads of canned fruit from the Chilliwack Canning and Preserving Co. Ltd. ready for shipment to Vancouver Wholesale Houses, 1910. City of Vancouver Archives, AM336-S3-2-: CVA 677-501.

So, when did fruit trees begin to appear in Vancouver?

According to the B.C. Fruit Growers Association, the origins of cultivated fruit are recent in the Pacific Northwest; the seeds of the first apple trees were planted at the Hudson's Bay Company's Fort Vancouver (now Vancouver, Washington) in 1826 and other fruit orchards were established at the Company's Fort Langley (1827). Part of this old Fort Langley orchard can be visited and is now part of the Derby Reach Regional Park in Langley, B.C.

Source: B.C. Growers Association. A Fruitful Century. https://www.bcfga.com/219/A+Fruitful+Century

The late 1880s and early 1890s were a productive agricultural period for B.C. settlers. The B.C. Fruit Growers Association was formed due to increasing agricultural organisations and provided guidance on fruit cultivation. In 1891, the association recommended an array of different fruits that were well suited to soil and weather conditions for the province. These included:

Fruit	Summer	Fall	Winter
Apples	Early Summer: Yellow Transparents, Red Astrachan	Wealthy, King	Northern Spy, Baldwin, Golden Russet, Ben Davis, Canada Red
	Late Summer: Oldenburg, Gravenstein		
	Keswick, Codlin, Alexander	Haas, Colvert, Princess Louise, Maiden's Blush, Red Bietigheimer.	Pewaukee, McIntosh's Red, Hubbardson's Nonesuch, Rhode Island Greening, Seekno- further, Grimes' Golden, Stark, Newtown Pippin, Yellow Bellflower
Sweet Apples	Golden Sweet	Bailey's Sweet	Talman's Sweet
Crabs	Transcendent, Hyslop, Montreal Beauty.		
Pears	Clapp's Favorite, Bartlett	Beurré, Clairgeau, Beurré D'Anjou	Lawrence, Beurre Easter
	Madeline, Marguerite, Brockworth Park.	Beurre Bossock, Howell, Duchess D'Angouleme, Sheldon	Josephine de Malines
Plums	Peach plums, Bradshaw, Imperial Gage, Lombard, Red Egg, Yellow Egg, Reine Claude de Bavay		
	Genii, McLaughlan, Moore's Arctic, Jefferson, Shipper's Pride, Smith's Orleans		
Prunes	Italian, French, Pond's Seedling, Coe's Golden Drop		
Cherries	Rockport Bigarreau, Olivet, Mezel, Black Republican		
Cherries (sweet)	Early Purple Guigne, Governor Wood, Black Tartarian, Napoleon Bigarreau (Royal Ann), Yellow Spanish, Windsor		

Fruit	Summer	
Cherries (sour)	May Duke, Large Montmorenci, English Morello	
Peaches	Alexander, Waterloo, Early Rivers, Hale's Early, Early Crawford and Wager	
	Foster, Shumaker, Wheatland, and Coolidge's Favorite	
Apricots	Not sufficiently tested to be recommended	
	Moorpark, Early Golden, St. Catherine, St. Ambrose, Early Montgamet	
Nectarines	Boston, Early Violet	
Quince	Rhea's Mammoth, Champion	
Oranges		
Grapes	Moore's Diamond, Meyer	
Strawberries	Crescent, Wilson, Sharpless, Bubach No. 5, Improved Jocunda	
	Haverland, Warfield No. 2, Triomphe de Gand	
Raspberries	Marlborough, Cuthbert, Golden Queen. Black caps Louhegan, Tyler, Gregg	
Blackberries	Snider, Kittatinny, Erie, Taylor. English gooseberries Industry, liable to mildew in some localities	
American gooseberries	Champion, Downing. Red currants Lay's Prolific, Moore's Ruby, Cherry currant	
White currants	White Grape	
Black currants	Lee's Prolific, Black Champion, Black Naples, Other potential varieties for planting	

Many heritage apple varieties were once popular in Vancouver and the surrounding regions. Can you recognise these varieties from the 1891 B.C. Fruit Association recommended planting list?

Jonathan, Wealthy, Northern Spy, Wagener, Grime's Golden, Spitzenberg, McIntosh Red, Delicious, Yellow Newton, and Winter Banana

These apples were advertised as some of the best varieties, according to a leaflet issued by the B.C. Fruit Growers Association. The publication was intended to educate housewives of Western Canada in the 1900s; however, outside of (Golden) Delicious and MacIntosh Red, you may not be familiar with many of these varieties.

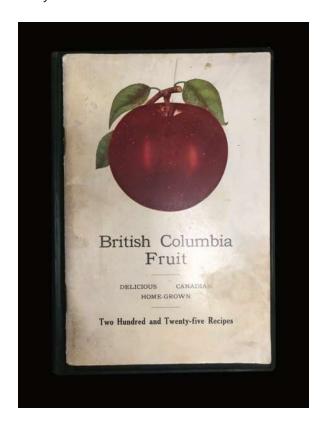


Fig. 14a. British Columbia Fruit Recipes c. 1911: a guide authored by the B.C. Fruit Growers Association to promote B.C. fruit consumption, including pages illustrating various popular fruits from 1880s-1910s [Book]. Museum of Vancouver collection, H998.17.9. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

This list includes a number of apple varieties that were cultivated because of their hardiness; they could be stored and preserved through multiple seasons. For instance, Northern Spy apples are best consumed from January to March—in the winter to spring period—a timeframe when no local fresh fruit is available. Such an apple that is still firm and fresh to eat was welcomed by turn of the century households.

Each variety of apple was also associated with its own flavour quality. For example, Winter Banana apples were popular since they could be used from December to February, and the fruits had overtones that tasted similar to bananas; hence, their name.

In the 1900s, apples such as Jonathan were considered the most popular apple of their day. This apple was particularly popular for cooking and desserts. Other secondary and tart apple fruits were used for juicing and cider making, while pears could be used to make non-alcoholic peri beverages.

Fruiting trees can remain in production up to 100 years and beyond. Fruit trees found at the Derby Reach Regional Park in Langley, a site associated with the Hudson's Bay trading fort established in 1827 and now part of a Metro Vancouver Park, are still fruiting today.

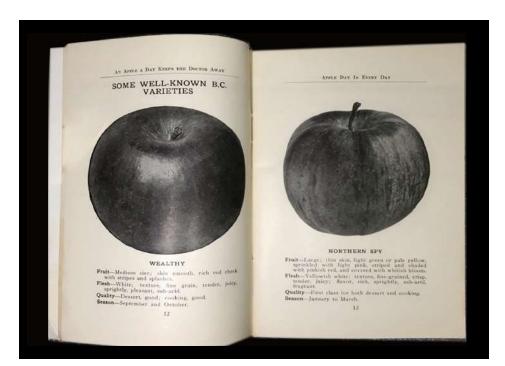


Fig. 14b. Sample page showing popular apple varieties in B.C. from the British Columbia Fruit Recipes, 1911 [Written by the Fruit Growers Association]. Museum of Vancouver collection, H998.17.9. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

Apple varieties we see in our orchards today, such as the MacIntosh and Golden Delicious, have seen an uninterrupted chain of care and propagation. Since their establishment, they have been carefully propagated through grafting and budding to continue to be available for sale at garden centres or their fruits found at our local grocery stores.

Sadly, a greater range of older fruit trees are harder to find in the City of Vancouver, although they are recorded in archival documents. There are certain fruit varieties which would have had historical associations with particular places that remain unknown in the city. Many immigrants and settlers brought fruit tree grafts that reminded them of heritage trees in their own home countries, such as the Copley Community Orchard with Pippin varieties. Other growers at the turn of century brought, imported, or bought fruit tree grafts or plants that were prestigious at the time or offered their owners access to a range of flavours. These grafts increased a family's household capacity to cultivate their favourite varieties.

The City of Vancouver has seen a process of rapid development of property sites in which fruit trees or orchard lands were largely turned over for the building of capital projects. Fruit trees that survive to date are prone, due to age, to become diseased or stressed with climate variances such as long drought periods, excessive rain, or cooler winters. Some varieties of fruit trees have fallen out of fashion due to their natural blemishes and shape, and others have not become part of the lifestyle of contemporary homeowners. Without care of fruit trees through regular watering, pruning, and harvesting, older fruit trees in Vancouver are simply easier to maintain through removal.

The VFTP has been able, through its voluntary services, to extend a lifeline of care to homeowners and their fruit trees by offering free services to assist in harvesting, running canning workshops, and sharing a portion of these food bounties with homeowners, communities, and charities. In 2021, the group harvested 11,000 lbs. of produce and saved it from going to waste by distributing it to 21 community groups.

Regarding the past and how it continues to affect today: Vancouver's privileged position of being a place of exchange (import and export) impacted how settler residents managed and how they fed themselves.

Tree Grafting

What is grafting? How do fruit tree species become popular?

Fruit trees grown from seeds often do not produce quality fruit. In fact, fruit trees grown from seeds rarely produce satisfactory tasting fruit. So, how does tasty fruit happen?

Seed-grown fruit trees often:

- · produce smaller and sour fruit.
- may grow to be massive trees with more canopy than fruit.
- may produce small yields of fruit or no fruit at all for up to seven years.

Many tasty varieties of fruit trees (apples, pears, quinces) are actually the product of cross pollination.

In nature, bees carry pollen between flowers and trees to create unique fruits. In a nursery situation, an agriculturalist will attempt to cross different fruit tree plants with other varieties in order to produce better tasting fruit.

Cross-pollination is when pollen from one plant variety fertilizes flowers of another variety, usually within the same species. This happens when special reproductive cells called gametes come from different varieties within a plant species. For example, male pollen from a Gala apple tree variety will reach a flower on a neighbouring Golden Delicious apple tree variety and fertilize it.

Resulting seeds thus have a new genetic make-up from the original tree. So, if these new seeds are planted to grow into a new tree, it will produce fruit that is different in quality than the fruit produced by the original parent trees.

Grafted fruit trees can guarantee a variety of fruit can be produced multiple times while maintaining the quality of the original fruit.

Grafting is a process where one fruit tree known, as the rootstock, is fused with a fruit tree branch of a different variety, known as a scion. The rootstock supports the fruit tree through its root system and keeps all the plant limbs alive. This part of the tree also controls how tall the tree will grow. The other section of the graft is the scion, which is used to form the fruiting portion of the tree. A scion is the upper portion of a graft, which is responsible for characteristics, such as fruit type, flavour, and colour.

Today's most popular apple such as the Macintosh (1811) is as a result of a small branch of the original tree being grafted onto another tree to produce the same fruit. This process, done over and over, has created a global industry of a particular type of apple. These varieties are now part of the top ten sold in the world; all because of the simple art of grafting fruit trees.

Grafting fruit stocks offer several key benefits:

- They can help continue a line of fruit that is often selected for being pest- and disease-resistant.
- They may be selected to withstand cold climates.

Note: Most peach and nectarine tree rootstocks ARE grown from seed. These are called seedling rootstocks. This is because:

- There has not been much success with breeding smaller versions (dwarfing rootstocks) of these trees.
- Peaches, apricots, nectarines, and sour cherries are self-pollinating, so the seed produced from these trees are very similar to the parent tree.

Source: The Simple Art of Grafting Fruit Trees. https://orchardpeople.com/grafting-fruit-trees/

BRITISH COLUMBIA'S FRUIT INDUSTRIES 1909

Understanding B.C.'s fruit histories requires both an economic lens and a social and historical perspective. These histories are also a story about communities becoming more self reliant in terms of fruit production.

In an article from October 1909, *Fruit Magazine*, Published monthly in the interests of Fruit Growers, Dealers, and Consumers, a glimpse of the costs of a variety of fruits available to consumers is given, which contrasts the Vancouver Board of Trade report from a decade earlier.

The crab apple is among the fruit varieties that were sold for household market consumption. The crab apple appears as the most affordable fruit to consume at a mere 50 cents per 20 lbs. Fruits sold in February were sold at a premium, as these were out of season and had been stored by traders in order to assist with the lack of fruit being available to consumers by winter's end.

EXCERPT:

"In the season of 1904, the fruit crop of British Columbia was valued at \$600,000 and the area under cultivation estimated at 14,000 acres.

In 1905 the area under fruit had been increased to 20,000 acres, and the total revenue derived therefrom was nearly one million dollars. In the same year something like \$500,000 was expended in the purchase and improvement of fruit lands and the average price received for grade 1 apples from October 1, 1905, to March 31, 1906, was \$1.27 per 40-lb. The early varieties started out at \$1 net, and during the latter part of February and March as high as \$2 per box was being paid.

The average prices of other fruits for the season of 1905 were: Pears, \$1.38 per 40-lb. box; prunes and plums, 75 cents per 20-lb. box; peaches, \$1.15 per 20-lb. box: strawberries, \$2.50 per 24 basket crate; raspberries, \$2.19 per 24 basket crate; blackberries, \$2.40 per 24 basket

cranberries, S'/ 2 cents per lb.; crab apples, 2 l / 2 cents per lb.; tomatoes, 5J/2 cents per lb.: currants, 7 cents per lb.; cherries, 9 cents per lb.

Outside of the quantities consumed in our own cities the chief market for British Columbia fruit is the prairie provinces; a market which will always demand the best that the fruit-grower can produce in ever-increasing quantities, so that British Columbia need have no fear, no matter how rapidly the industry develops, of an over-production of good, clean commercial varieties."

Such a comprehensive record gives us a good overview and shows us the fruit was being sold and marketed to expanding city centres in British Columbia. These included Victoria, Vancouver, Nanaimo, and New Westminster, to name a few. Surplus fruit was being shipped by rail and sold to the prairie provinces. The fact that cultivation areas increased by nearly fifty percent annually between 1904 to '05 illustrates the high demand for fruit within B.C. and adjacent provinces.

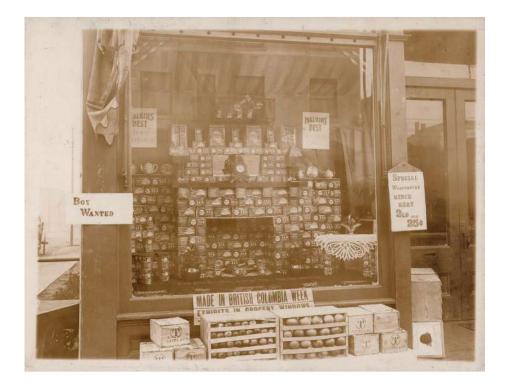


Fig. 15. Window display of W.H. Walsh Grocer displaying made in B.C. goods, 1890s [Photograph]. City of Vancouver Archives, AM1376-: 2017-028.4.

B.C. had its own fruit basins and as such had secure food sources, but there was not the same encouragement of food development within the city when items could be quickly freighted from the province's Fraser Valley or interior by rail for immediate distribution.

Wages for factory work in the 1880s: covering mills, mines, and general labour was poor averaging between \$1 to \$1.50.

The cost of a fruit in 1879 was \$0.38—this was a large investment in terms of outgoing costs. Workers had to cover the costs of food, shelter, health, and transport from their earnings. If a worker had a family, this wage would be considerably stretched to support children and a wife. (Murray, S. M. (1986). *The nursery industry in British Columbia*.

Settler Community Orchards

Less affluent settlers of Vancouver brought their own fruit tree seeds with them in hopes of establishing their own food and market gardens. However, with seeds there is no guarantee that they will mature true to the original stock variety. As such, popular fruit tree varieties are best propagated by grafting budding tree stocks onto compatible plants. Initially, fruit tree grafts (budding branches from fruit trees) were carried by settlers along their long journeys from Europe, the United Kingdom, Eastern Canada, and the United States, kept hydrated and alive in starchy root vegetables such as potatoes. In the early 1900s, grafts and small tree seedlings could be mail ordered from either local seed agents in Vancouver or sourced directly from nursery companies based in Eastern Canada (Toronto, Montreal) or the United States (New York) to Vancouver. Whether grafts were carried across by hand or mail ordered into Vancouver, for these stocks to flourish, settlers required a compatible fruit tree to support the grafts. Without many mature fruit trees available or local to Vancouver, settlers recognised that the local Pacific crabapple trees could be a suitable recipient tree from which grafted stock could grow.



Fig. 16. Exterior of T.J.
Bailey residence: No
69, 13th Avenue, 1901
[Photograph]. City of
Vancouver Archives:
Major Matthews
Collection, AM54-S4-:
Bu P387. Notice fruit
trees at the front and
sides of the home with
fruit trees planted to
help provide extra food
for the family.

In Vancouver, it was often early settlers prior to 1900, those who were widowed later in life, or poor working class families up to the 1940s, who used their gardens to help them partly live off the land. Growing fruit or berries is not labour intensive, so it's an activity that could be easily supported while the household continued with other jobs. A fruit harvest ensured families had increased food security without needing to spend extra money on groceries. Fresh fruit could be enjoyed immediately at harvest time, stored for autumn use, and canned to last through winter and spring. Fruit in whatever form—fresh or preserved—offered a sweet compliment to a meal.

See examples such as Copley Community Orchard (http://www.copleycommunityorchard.com/copleyhistory/)

Empress Manufacturing Company 1900s

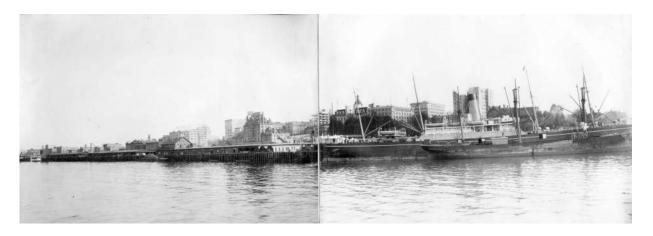


Fig. 17. Vancouver's Waterfront: CPR station and Kelly Douglas & Co. Warehouse with docking cargo ships, 1900s [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-1-M-11-: M-11-46.

Yaletown became a manufacturing base in the city of Vancouver at the turn of the twentieth century. Its development happened in response to the fact the warehouse district along Water Street became fully tenanted by traders, merchants, and manufacturers. The benefit of setting up within the Water Street and Yaletown districts was that both were serviced by rail lines that passed through the areas, connecting Vancouver's port (e.g. Coal Harbour) to the province and the rest of the country. Rail lines, such as Northern Rail and the Canadian Pacific Railway, enabled companies to exploit the lines bringing raw goods in and manufactured or processed goods out. The combination of the port and rail systems also made possible connections to international destinations, such as the United States, Asia, and Europe.



Fig. 18. Empress Manufacturing Co. Ltd. Advertisement. Web image credit: Changing Vancouver https://changingvancouver.wordpress.com/tag/empress-manufacturing-co/ [Accessed November 3, 2022].

One key manufacturer to establish itself in Yaletown was the Empress Manufacturing Co which was established in 1905 and opened its warehouse in 1909. As trade and custom continued to increase, the company built a new three-storey neighbouring warehouse in 1911. The company traded imported coffees and produced local jams and jellies. Empress sold their jams and jellies under the Empress label which had a sailing ship on it.



Fig. 19. Empress Brand Pure Crabapple Jelly, 1940s [Jar]. Museum of Vancouver collection, H976.1.9. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

Available research into the company states that it was managed by one of the founders and the inaugural director, Walter Taylor, who was also a manager of the Vancouver Fruit Canning Co.—also referred to as B.C. Fruit Canning Co. (1890)—and already had strong links to B.C. fruit growers and fruit crops. Empress jams and jellies were strong sellers for residents, and the company's prominence in Vancouver reduced the need to import fruit compotes and jams from the neighbouring U.S. and the United Kingdom.

During a series of research trips to the Museum of Vancouver (MOV) and with the support of Wendy Nichol, Collections Manager at MOV, a jar from the Royal Empress Jelly company was brought to our attention.

Interestingly, the scale of the jar is smaller than normal jam jars of today, and was likely used to hold Pacific crabapple jelly. While there is no indication as to where the Pacific crabapples initially came from, it's important to realise that B.C.'s only native fruit was, at the turn of the century, widely cultivated and harvested.

The Empress business and its trade were acquired by Safeway in the 1930s and remained under its management until 1955. Throughout this time, the Empress Manufacturing Company label continued to be active.

Pacific crabapples have been and remain significant to Indigenous communities—how can we communicate their significance to a wider audience beyond a jelly jam today?

See:

Fruit Magazine 1909-10. https://archive.org/stream/n1to12fruitmag01vancuoft/

n1to12fruitmag01vancuoft djvu.txt

 $\underline{https://changingvancouver.wordpress.com/tag/empress-}$

manufacturing-co/

Museum of Vancouver. OpenMov online collections. https://5111.sydneyplus.com/argus/final/porta-

l.aspx?lang=en-CA

FRUIT ALL YEAR ROUND: THE ROLE OF CANNING

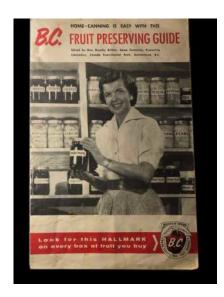


Fig. 20. B.C. Fruit Preserving Guide, 1950s [Book]. Museum of Vancouver collection, H987.214.1. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

Harvesting fruit reflects our knowledge of plants, seasons, cultures, peoples, places, and, of course, our access to crops. Fruit is versatile—it can be dried and stored, boiled to make preserves, jams, jellies, or even baked. Depending on fruit varieties grown, some fruits within the same family, such as apples, can be harvested across a wide range of months, from early July to November.

Oddly, there was no sense or suggestion that, for the most part, Vancouver families could grow their own food As such, families were reliant on greengrocers to stock crates of fruit that could be used for home consumption.

Why was canning of fruit important to their diet? By consuming preserved fruits, individuals had access to a wider palette of food at all the times of the year, as well as a nutritional diet of the natural minerals and vitamins associated with the fruits. Canning also enabled households in Vancouver to have access to fruit throughout the winter and spring seasons when there was a lack of readily available fresh produce.

Making canned foods required preparation and, at the turn of the twentieth century, it was most often part of a woman's household chores. A woman might purchase a crate of fresh fruit, which was delivered by her local grocers, that she would then prepare and can.

Preparing fruit might be done through a simple boiling method; however, because many fruits are acidic, they naturally prevent the growth of bacteria such as Clostridium botulinum, which is associated with food botulism. To prevent browning, fruit might be mixed with a few drops of citric acid or lemon juice solution. Sugar also helps canned fruit hold its shape, colour, and flavour, but it is not needed to prevent spoilage. Fruits could be packed in jars with hot water or juice. Pickled vegetables and chutneys might be prepared with added vinegar.

Fruits themselves were typically canned using a boiling water bath technique. Boiling water canning, or water bath canning, was the most common method of home canning. Water bath canning is used for preserving high-acid foods only, like fruit, jams, or pickles. In water bath canning, jars or pots are filled with the prepared fruits, then screwed with clean lids on top. The lidded jars are then submerged in a pot of boiling water. The heat forces air out of the jars to prevent spoiling; the process also seals the lids so preservation lasts for up to a year.

See: Canning Foods at Home. https://hgic.clemson.edu/factsheet/canning-foods-at-home/

The Rise of Settler Nurseries and Orchards

"At the turn of the century in the Lower Mainland, a number of nurseries were established. Brown Brothers and Company limited, an early nursery, greenhouse and florist business was opened by Joseph Brown in 1898 with his three sons, Alfred, Will, and Edward, with a fourth son, Joseph Jr., joining later. In 1903 or 1904, the first Brown Brothers retail store opened at 48 East Hastings Street. By 1928, Brown Brothers had grown to five stores.

In 1910, the Canadian Pacific Railway opened Shaughnessy Heights, an exclusive housing development in Vancouver. Brown Brothers and Company Limited landscaped many of the palatial homes. In 1912 well before the advent of the back hoes or hydraulic equipment, the firm transported a 15-meter California redwood tree from New Westminster to the subdivision.

Royal Nurseries, 1905-1910, the largest nursery in Vancouver, also played a role in the development of Shaughnessy. Many of the trees and shrubs grown by the nursery were used to landscape the estates of Shaughnessy and homes in the west end of the City. Carved out of the forest land at 50th avenue and Maple Street, the Royal Nurseries was the proud owner, in 1912, of Vancouver's second motorised truck.

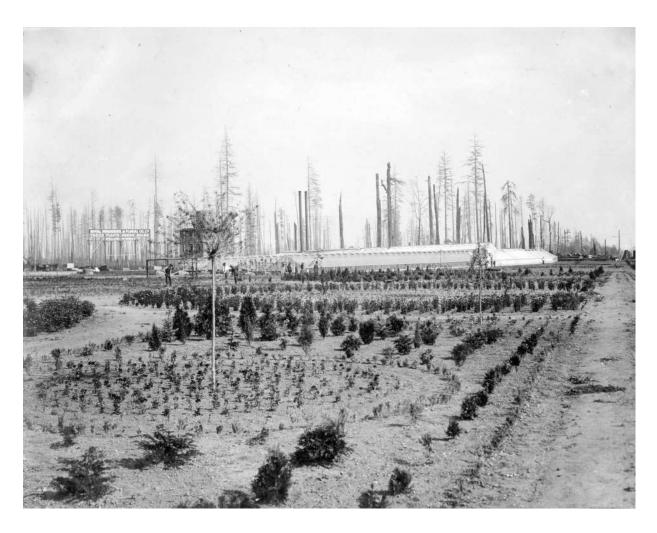


Fig. 21. Royal Nurseries by 49th Avenue and Royal Station of B.C. Electric Railway, Vancouver, 1912 [Photograph]. City of Vancouver Archives, AM54-S4-1-M-11-: M-11-19.

Henry M. Eddie was a landscaper who started his own fruit growing enterprise in the 1910s near Haney (Surrey, B.C.) but it failed. His savings gone, he took a job as a foreman for the Royal Nurseries in Vancouver. The nursery soon liquidated and left Eddie unemployed again.

In response to the burgeoning fruit industry in the Okanagan, the Oregon Nursery Company, one of the large American growers of fruit trees, decided to open a branch in B.C. to supply trees. Henry M Eddie became production manager. His first decision was to locate the new tree nursery, named British Columbia Nurseries Limited, in Sardis (Chilliwack), B.C. Production began in 1917. The nursery produced both fruit and ornamental trees. Eddie also specialised and was the first to discover a thornless rose stock, now used in commercial production of roses worldwide. In 1922 he established his own nursery and continued the production and development of ornamental trees and roses. He introduced many new hybridized rose varieties to the nursery industry in the 1930s and 1940s. He may be best known for his contribution of a hybridized Dogwood, *Cornus x Eddie's White Wonder*, released commercially in 1955 to the nursery sector. This species was selected in 1986 by the Vancouver Parks Board as the City's centennial commemoration tree.

The first garden centre opened on 4th Avenue in 1951 in Vancouver. Garden centres promote one stop shopping where retail customers can purchase soil, garden tools, seeds, plants, and furniture plus other goods (books, cut flowers, etc.).

Thus, Vancouver remained a city wherein flora cultures were part of bought services or controlled by larger industries. The opening of a garden city centre comes rather late in the City's establishment, and again illustrates the City's own specific tastes shaped by diverse settlement and land use.

To this day, if one looks at the Agricultural Land Resource Map for B.C. and specifically for the City of Vancouver region, the only area designated in terms of agricultural land use is associated with Southlands (ALR). This area does not maintain food crops like it once supported, but rather supports livestock, specifically horse stables.

Sources:

Murray, S. M. (1986). *The nursery industry in British Columbia*. First edition. Burnaby, B.C.: British Columbia Institute of Technology. Pp.10-11.

Agricultural Land Resource Map, https://governmentofbc.maps.arcgis.com/apps/webappviewer/ index.html?id=87dee902dc5e443fbff8ca7b4311b407

Copley Orchard 1905–1917

In the 1850s, the area around what we now associate with Trout Lake was the home of early community orchards and homes.

Of note, Trout Lake was a natural peat bog lake fed by streams and was home to trout, salmon, and beaver. In the pre-contact era, First Nations peoples' trails passed alongside, as this was an important area for food harvesting.

"From the 1860s until the city built its Capilano water system in the 1880s, the lake provided water, via a flume, for the boilers at Hastings Mill on Burrard Inlet and was a popular skating rink during cold winters."



Fig. 22. House near Trout Lake, 1920 [Photograph]. Vancouver Museums and Planetarium Association collection. City of Vancouver Archives, AM336-S3-1-: CVA 677-1109.

Due to its surrounding wetlands, the Trout Lake area was also used to grow cranberries at one point. However, it then became an area of great interest for newcomers who recognised that draining the land would support ideal conditions for farm land and plant nursery production. By the 1900s, the swamps were drained and fertile land parcels sold off.

The Brown Brothers Nurseries Ltd. established one of its many cultivation centres at the lake, as did Englishman and leather boot trader Richard Theophilus Copley (October 3, 1850 - April 9, 1917). Copley, a new Vancouver resident who came to the area in 1905, bought parcels of land surrounding Victoria, 28th Street, Nanaimo, and 12th Street. In their time, this land was referred to as the "Hastings Townsite."

Copley developed his land to include a large estate home referred to by the family as "West Green" and by the public as the "Copley Ranch." The East section of this property included an extensive orchard. The road that ran between the house and the orchard was named Copley Drive, and in 1910 it was recognised by the city and renamed as Copley Road, though is now referred to as Copley Street. Copley's property housed two greenhouses and numerous orchard trees, such as cherry, walnut, apple, and plum. Copley grew a variety of apples which would now be considered heritage fruit. In particular, he was quite proud of an English variety of apple species known as the Golden Pippin, which dates back to the seventeenth century.

Many of the apple species bought and grown in the City of Vancouver over 120 years ago, such as the Golden Pippin, would be considered less than ideal to cultivate in the present day. This type of apple exhibits russet dots, brown and pearly staining, and in Vancouver soils grew to about five to seven centimetres in diameter. As a small fruit, it was enjoyed and cultivated for the fact that it was both a sweet fruit to eat fresh after a few weeks in storage, and could be stored for long periods of time, such as over winter. Pippin apples are known for mellowing in flavour when kept in cold storage, and in time their sugar content increases so the flesh develops a sweet-tart flavour associated with notes of pine, citrus, walnut, or even green tea. This apple has an even more extensive flavour

when cooked. Fruits such as the Pippin apple could easily be poached whole to make sweetmeats, jam jelly, or cider.

Many heritage apple species were best enjoyed cooked or preserved, but a lot of flavours and varieties of apples have since disappeared from community and private orchards. Copley was acknowledged for the variety of apples he grew—each of these varieties extended the capacity of what his family household could cook and prepare.

"Of all the fruits of the universe—none have the breadth of choice covered by our loved apple. In my garden I have more than 120 different kinds and I am adding to them."

- Richard Copley, 1910

Today, a community orchard has taken the place of the Copley orchards in a similar location, and is accessible by the public.

See: https://placesthatmatter.ca/location/trout-lake/

Copley Community Orchard. http://www.copleycommunityorchard.com/copleyhistory/

Brown Brothers Nurseries, Vancouver, B.C. 1912–1930s

With large glass houses once situated by Trout Lake, the Brown Brothers Nurseries were established in 1912. The Brown Brothers offered goods to City of Vancouver residents through its commercial storefronts on Hastings, Main Street, and later across other civic locations, supporting both floral and home garden services. While several greenhouse nurseries existed under the umbrella management of Brown Brothers Nurseries, none were truly engaged in producing food staples for city residents, although there was a period when the nurseries grew cucumbers sold locally in food shops.

The following advertisement printed in Henderson's *City of Vancouver Directory, 1911* (a form of yellow pages listing for citizens and businesses) hints at some of the key services that were on offer through its orists division:

"BROWN BROS. FLORISTS FUNERAL EMBLEMS A SPECIALTY Cut Flowers (in Season) Rose Bushes, Pot Plants, Flower, Pots, Flower and Vegetable Seeds, Fertilizers, Metal Wreaths (with glass globes) 115 Hastings St. East VANCOUVER, B.C." – Henderson's City of Vancouver Directory

Brown Bros. Florists' original flagship shop was located in the Hastings Street corridor, residing among theatres, sweets shops, beauty schools, physicians, optometrists, opticians, druggists, bookstores, tobacco outlets, housing, pubs, and clothing and shoe shops. The other main destination store in this original 19th century district of Vancouver was Woodward's department store.

The Brown Brothers had a series of plant nurseries established throughout residential areas of Vancouver that were less densely populated; a nursery was set up in and around Riley Park and over to Grandview Hwy. and Rupert Street, which produced a staple of thornless rose bushes, chrysanthemums, and geraniums, which were in popular demand for the gardens of affluent homeowner settlers in the city.



Fig. 24. Brown Brothers Floral Display, Pacific National Exhibition, 1909. Photograph courtesy of Brown Brothers Company. City of Vancouver Archives, AM431-: CVA 25-03.

An exception to the floral output of Brown Brothers was the production of cucumbers. This high water content based vegetable remained part of British culture and dear to the heart of many of the affluent population flocking to the city. Salads or sandwiches without cucumbers were not complete. To accommodate the demand for cucumbers, Brown Brothers cultivated this condiment vegetable for its client market. Cucumbers imported from some distance to the city would spoil or bruise too easily, hence the need to grow them locally. While not a large step forward in terms of food security, this was an early example of where the city was able to meet some demand for local food supply.



Fig. 25. Interior of hothouse with hanging cucumbers, 1912. Photograph courtesy of Brown Brothers Company. City of Vancouver Archives, AM431-: CVA 25-21.

Source: Brown Brothers Nurseries. Our History. https://brownsflorist.com/our-history/

VICTORY GARDENS DURING THE WAR YEARS 1914–1918, 1940s



Fig. 26. Armed Forces with gardening tools (aiding with food production), New Westminster, 1918. Photograph by Stuart Thomson (1881-1960). City of Vancouver Archives, AM1535-: CVA 99-676.2.

Victory gardens were vegetable gardens planted during WWI and WWII in order to ensure local residents in urban areas had access to fresh and continuous produce. During the war years, Vancouverites grew local food in order to better feed themselves and help support the troops in Europe. It was possible to send more food overseas due to less demand in the city; cargo trains were deployed to carry food across the country and other important supplies to be shipped to the war front.

Victory gardens came in all shapes and sizes—from window boxes to community plots—with the goal of enabling neighbours, communities, and people at home to have food security in the absence of imported foods and less agricultural produce available from farms locally and across the country.

Government agencies, newspaper publishers, local businesses, schools, and even seed companies supported communities in participating in urban farming. Support could take the form of instruction, seeds, or access to land or tools. While the gardens themselves disappeared quickly after the war years, there are traces of newspaper articles, diaries, and people's memories of these events.

The Vancouver Sun ran a series of competitions to encourage residents to share stories of their efforts in growing victory gardens. Vancouver's winning entry in 1942 was a garden located at East 39th Avenue. The location gives a sense of the vast residential lots and fertile soils in and around the city that supported communities in times of food shortages and helped with sustainable and resilient living.

Food Security Between the Wars

While many Vancouver family homes between the 1910s and 1930s were surrounded by land or green verges, most kept their properties maintained with lawns, foundation planting (decorative plants by the house's perimeter) and with several trees planted across the front to add shade. During harvest times (June through October), grocery stores such as Woodward's ran promotions and decorated their food floors or merchant windows with fruits advertising B.C.'s bounty. Many Vancouver housewives were encouraged to buy crates of fruit during these promotion weeks to make their own jellies, jams, and canning preserves.

Japanese Settlers

Leading up to the war, Japanese Canadian settlers put down roots in the Lower Mainland, and many of these settlers bought acreage with the intention of farming.

"The first Japanese settlers arrived in Maple Ridge in 1907, mostly buying farmland and settling in as berry farmers. At the time, work could be or had the potential to be short for Japanese men, as most business in B.C. were owned by white setters, who could not always be counted on to hire non-white workers. The Japanese settlers therefore were encouraged by their fellow Issei (first generation Japanese settlers) to take their future into their own hands by buying land and farming.

By 1927, 5,728 acres of British Columbia were farms owned by Japanese families, 2,378 of those acres were in Maple Ridge. One-third of the Japanese Canadian population lived in the district of Maple Ridge on 220 family-owned farms. That was 30% of the population of Maple Ridge."

After 40 years of establishing themselves as a large part of the agricultural and cultural community, clearing land, starting businesses, building the first greenhouses in the district, and building temples, halls, and schools, World War Two began and changed everything. Internment was not immediate with the declaration of war. The fear-based racism against the Japanese in B.C. began with war measure acts limiting farmers purchasing power, instituting curfews, mandatory fingerprinting, telephone and driving ban, and eventually Japanese community halls and schools were closed. In 1941 Japanese

Canadians were 'asked' to voluntarily identify themselves in a census. Then by 1942 they were required to submit their identification for the census and later that year the "evacuation" of the Japanese began."

Once Japanese internment had begun, a number of Japanese internees were taken to Coldstream Ranch—a ranch near Vernon whose orchards grew apple, cherry, and pear trees—to work.

"With the advent of World War II many of the ranch's employees enlisted and were off to fight in the war, leaving Coldstream Ranch once again with the labour shortage. Part of this problem was resolved in 1942 with the arrival of Japanese Canadian internees. The Japanese Canadian interns who were interned in the Slocan Valley were brought to the Okanagan to work in the orchards. They were followed in the spring of 1944 by Japanese Canadian young people, mainly girls, who were hired to thin the apple orchards, and by 1945 nearly 100 Japanese were employed in the Coldstream area."

Source:

Buswell, S. and City Farmer (2003). "Victory Gardens: The Garden Warriors of 1942". City Farmer. https://www.cityfarmer.org/victgarA57.html

Maple Ridge Museum. Japanese Settlers of Maple Ridge. https://mapleridgemuseum.org/japanese-settlers-of-maple-ridge/

Coldstream Ranch. 1900-1950. Available at: https://www.coldstreamranch.ca/coldstreamranch/1900 - 1950.html

Vancouver Garden Styles



Fig. 27. Boarding House 708 Cambie Street, 1894 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Bu P74.1.

Several architectural styles emerged, including the Victorian style home, a one- or two-storey house with complex rooflines, asymmetrical facades, and bay windows. Edwardian style homes, popular from about 1898 to 1910, were less complex and decorative and more symmetrical. These styles were direct imports from Britain and Eastern Canada, with their timber construction being the only vernacular adaptation.

The third style, popular from the 1910s to 1930s, was what the middle class market referred to as bungalows, and was created with local materials. The word bungalows is derived from colonial India to describe a low, one-storey building surrounded by wide verandahs.

The wealthier city residents settled in Shaughnessy and Kerrisdale, where they are known to have built some grand custom homes. As a service town, Vancouver had a substantial population of transient single men. These men found board and room at the many hotels in the downtown area. Hotel pubs were also the main source of entertainment for single working men. Vancouver, like most British colonial towns, was a segregated society, evident in its neighbourhoods. Within this British constructed community, the management structure dictated the class divisions of the neighbourhoods.



Fig. 28. 1617 Graveley Street, 1895 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Bu P308.



Fig. 29. California bungalow house, built by Vancouver Home Builders, Kitsilano, Vancouver, 1912 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-1-M-11-: M-11-67. These homes were often set-up by owners as both residence and boarding house for lodgers



Fig. 30. Cottages on Pacific Avenue at Hornby Street, 1931 [Photograph]. City of Vancouver Archives: Major Matthews Collection, AM54-S4-: Str N16.

Worker's cottages were typically situated close to their workings. Their homes, sometimes company owned houses, were modest in design and ornament. The middle class, comprising business managers, owners, and highly skilled trades people, were primarily located away from mills and service industries. While upper class merchants owned homes, wealthier British members of the community were located on large pieces of land primarily away from other classes and residences.

The establishment of commercial nurseries complemented the dominant colonial settler ideologies. Celebrations and events were to be shrouded with flowers and plants, whether to create opening entry facades or to act as large banners to emphasise an organisation or activity. With these fanciful creations came the need to have plant nurseries to either provide potted plants or cut flowers for these occasions. So large was the industry of cut or potted flowers and exotics that Brown Brothers, one of the main nursery growers in the city, had three sites dedicated to this niche production area. A small percentage of the nurseries grew specialised crops, such as cucumbers, that were too difficult to import easily from elsewhere in the province.

Brown Brothers nursery workers also acted as key gardeners, advisers, and trades people providing services to the "big houses" or the land and homeowners of estates in Southlands, Shaughnessy, and Kerrisdale. For these homes, foundation planting (plants grown at the base of a home) and the addition of trees to create shelter and canopies for garden parties were the main stay in terms of garden arrangements.

For middle and lower class families, as well as boarding room houses, gardens were extremely limited and not generally tended for food production. A few exceptions seen in the city archives included families who may have had more children than salaries could enable feeding—fruit trees were planted and grown to help create extra food security in the form of fresh or canned produce for the autumn and winter periods.



Fig. 31a. Greenhouses & sheds of Brown Bros. Florists, Broadway & Rupert. Photograph courtesy of Brown Brothers Company. City of Vancouver Archives, AM431-: CVA 25-10.



Fig. 31b. Seedlings and blooms in chrysanthemum greenhouse, Brown Bros. Florists, 1912. Photograph courtesy of Brown Brothers Company. City of Vancouver Archives, AM431-: CVA 25-14.

See: https://vancouversun.com/news/staff-blogs/history-of-vancouvers-private-gardens https://www.thecanadianencyclopedia.ca/en/article/landscape-architecture

FREEZER AND FRIDGE CULTURE 1940-1960S

Changing technologies and evolving homes—the advent of the mass-produced fridge boxes started to change how homes and residents could manage their kitchen and meal planning. Up until 1929, refrigerators with vapour compression systems had caused several fatal accidents when the toxic gases, from either the sulphur dioxide or methyl formate used as a refrigerant, were leaked. Research was initiated to develop less dangerous methods of refrigeration, leading to the discovery of freon, which became the standard for almost all domestic refrigerators. The introduction of freon gas compressor fridges played a major role in expanding the use of home cooling units to keep food fresh and to extend the shelf life of perishable produce.

Home freezers, as separate compartments of refrigerators that held more than just ice cubes, started to appear in the 1940s. These units accommodated a new trend in food preparation and storing frozen foods. The concept of frozen foods was previously associated with large-scale food manufacturers or seen as a luxury item; however, by the late 1940s to early 1950s, the availability of fridge-freezers and independent freezer chests started to become commonplace.

With the ability to chill and keep food stuffs long-term through freezing, manufacturers and newspapers started to promote new ways to prepare fruit and other fresh goods. Critically, in the post WWII period, the Canadian public was eager to move forward from rationing, as well as older ways associated with life at the turn of the century. Traditional processes of canning and preparing food became less popular in the context of the modern appliances, such as the freezer chest. The more labour intensive skills associated with food canning was overtaken by practices such as lightly stewing fruit or placing cleaned and skinned fruits into juices, which could now be stored directly in freezer boxes and bags for long-term preservation.

The adoption of the freezer chest was associated with modern living and moved Vancouver residents into a future space of food security. This passage to an electrical future had steady repercussions in diminishing the need to undertake sustainable food practices, such as canning and maintaining backyard fruit trees.

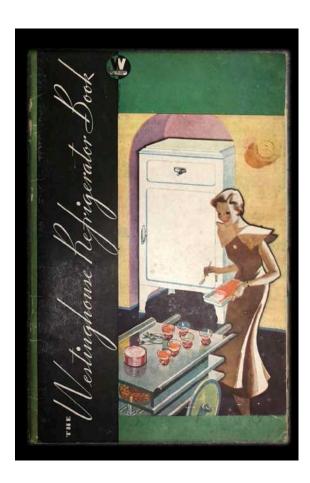
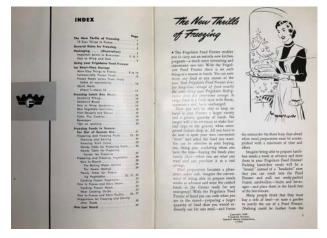


Fig. 32a. Westinghouse Refrigerator Cookbook, 1940s [Book]. Museum of Vancouver collection, H978.58.40. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

Fig. 32b. Index and introduction page of *Westinghouse**Refrigerator Cookbook, 1940s [Book]. Museum of Vancouver collection, H978.58.40. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.



By the 1950s, it was estimated that about 80 percent of farms and more than 90 percent of urban homes had a refrigerator in North America. The freezer chest as a separate appliance was steadily marketed to consumers from the 1940s onwards, and it was commonplace by the 1970s for most North American homes to have a fridge and a separate freezer chest.

By the 1980s, the first energy labelling programs were launched in many countries around the world, allowing consumers to compare the energy efficiency of products such as refrigerators, as they were recognised as high consumption devices. Freon cooling systems were also identified as contributing to climate change effects and damaging the ozone layer. Many refrigerators were replaced with safer alternatives. While consumers are now looking for energy efficiency in their refrigerators and freezer chests some 40 years on from their introduction, the knowledge and interest in fruit canning and jarring, once commonplace, has now become a specialized skill, particularly in urban areas such as Vancouver. Community gardens and orchards are championing canning skills and processes as they are great ways to keep fruit over several seasons without adding to the electrical grid.

Sources: https://en.wikipedia.org/wiki/Refrigerator;;
https://www.thecanadianencyclopedia.ca/en/article/electrical-appliances-industry

WOODWARD'S 1890S-1990S

One key retailer came to dominate the way Vancouverites shopped and fed themselves: Woodward's department store in downtown Vancouver operated from 1892 until its takeover in 1993 by the Hudson's Bay Company.



Fig. 33. Interior of Woodwards Grocery Department, 101 West Hastings Street and Abbott Street, 1904. Photograph courtesy of Woodward's Stores Ltd. City of Vancouver Archives, AM220---: CVA 809-26.

Woodward's department store first opened at the corner of present-day Main and Georgia in 1892, offering groceries, housewares, clothing, and tools to locals. The corridors between Abbott and Carrall were in the commencement of becoming early Vancouver's retail shopping district. This location was also the main thoroughfare leading to the rapidly growing town and then-capital of the province, New Westminster. Looking to expand the business, the founder, Charles Woodward, farmer turned entrepreneur, closed the first store and opened a new purpose-built four-storey retail shop at the corner of Hastings and Abbott in 1903. Woodward's business grew exponentially in parallel with the growth of the city. Vancouver's population was about 14,000 when Woodward's first opened in 1892 and was almost at 130,000 by 1912. By the time Woodward's downtown store closed in 1993, the food floor had expanded and took up the entire lower main floor of the department store.

The popularity of Woodward's led to another store being established in Vancouver. It would be the eighth in the franchise, with others opened earlier in B.C. and Alberta. The second Vancouver location, opening in 1959, formed the basis of the Oakridge shopping mall (now Oakridge Centre) at the intersection of West 41st Avenue and Cambie Street. Similar to the downtown store, it prided itself on a well-stocked food floor and a parcel depot located in the parking area for fast collection of goods.

Food and Retail

Charles Woodward, founder of Woodward's store (1892), pioneered the concept of one-stop shopping. Woodward's department store offered customers a food emporium experience and access to a variety of local, national, and imported fresh, canned, and preserved meats, cheeses, dairy, vegetables, and fruit.



Fig. 34. Interior of Woodward's Department Store at Hastings Street and Abbott Street fruit displays, 1905. Photograph courtesy of Woodward's Stores Ltd. City of Vancouver Archives, AM220---: CVA 809-20.

Grocery shopping at the turn of the 20th century was counter service driven—but it could be time consuming to have one's shopping orders completed while a clerk found your items. It also required one to go shopping across a number of small specialist retailers in a business district. Typically, Vancouver residents bought produce at a greengrocers, and then travelled to other specific specialist shops such as dairies, local butchers, dry goods stores, and fishmongers to acquire other goods. Woodward's store brought together a variety of food shops and services so customers could efficiently find everything across the shop floor and had the opportunity to browse and cross compare brands and products at their own leisure, rather than travelling to numerous shops to fulfill their orders.

Woodward's customers were allowed to pick up items, place these in their own baskets, and see the costs of items on the shelves. While this may seem standard practice today, such direct handling of goods and knowing the exact cost of each product was a welcomed novelty. By enabling an independent shopper to come to the foreground and make their own informed decisions about what type of products could be bought within one's own set budget, Woodward drew in large crowds of diverse income earners.

Woodward's strategies in terms of food distribution and sales innovation may have indirectly created a very different type of city in terms of food production and self-sustainability.

From the late 1800s, Woodward's also offered a mail-order option where customers could pre-select groceries and have these delivered right to their door. This service was later expanded to phone service where, twice a day, deliveries could be forwarded to customers for home door delivery. Many of these ideas were ahead of their time, and are now seen as updated services like DoorDash today.

During the COVID pandemic, the concept of curbside pickup emerged, the idea that something could be preordered then collected. Woodward's had already modelled this type of more seamless collection. In the 1930s, store management constructed a customer parking and drive-in garage to accommodate customers driving and collecting groceries from set checkpoints. It also tried to ease indoor food shopping woes for customers, offering them free parking while shopping. Customers typically travelled once a week to the food floor and were likely overburdened with the volume and weight of the week's groceries in their food trolley. To assist in store shoppers, the department store allowed customers to leave their groceries at a desk while they shopped elsewhere and then provided porters or bagging assistants at the checkout or collection counter that could carry purchases right to your vehicle and load them in for you under your direction.



Fig. 35. Trucks at Woodward's: Woodward's delivery service depot and vehicles, Sept 24, 1931. Photograph by Stuart Thomson (1881-1960). City of Vancouver Archives, AM1535-: CVA 99-4041.

In this way, Woodward's department attempted to remove barriers for its clientele making food shopping more efficient, fast, and fitting within one's comfort of in-store or phone shopping.

The store also dominated food shopping trends by enticing consumers through specific flyer deals of advertised food at a set discount price, with "sales" held on the first Tuesday of every month. In 1910 the store started these sales at "25 cents day sales" that evolved and changed as prices rose—up to "\$1.49 days" between the 1970s-80s. Some of the food products on offer as part of promotional sales were labelled under the Woodward's brand, known already for its good quality and exceptional pricing value. Some products were manufactured in-house before the customer's own eyes, such as the churned and grinded peanut butter you could order from the food counter, while others were sourced from local food producers. (Smith, M.G. 2021).

Woodward's, from its start, always ensured its food floor was stocked with hard to locate goods from clientele's home countries and different locations across the globe. When it opened in the late 1800s, a core part of the city's population had migrated from Britain to Vancouver. As such, the store ensured its pantries were stocked with meats, preserves, cheeses, and cooking and baking goods from the United Kingdom. As the population of Vancouver grew and its diversity increased, the store continued to stock hard to find specialties and ethnic foods not available anywhere else. Under its banner of "Shop Around the World," food promotions would take place advertising specialty foods across the globe. By the 1950s, the store had its own food demonstrator area (located in the houseware section) where customers could learn about new recipes and the latest cooking processes. As part of its free promotions, consumers were encouraged to collect recipe cards that were placed by specific food products. "Bea Wright" recipes were used as one of the vehicles to help consumers gain confidence and learn how to cook the perfect meal nutritionally and within budget. In the 1960s and '70s, Mona Brun engaged customers with cooking in-store and via Culinary Capers, an hour-long TV show that was sponsored by Woodward's and could be found on local TV stations.



Fig. 36. Example Mona Brun recipe leaflet from Woodward's "Creative Home Cooking" cookbook, 1980-1985 [Book]. Museum of Vancouver collection. H2014.12.147. Photograph by Sylvia Grace Borda, 2022. Reproduced with permission from the Museum of Vancouver.

In the operation of Woodward's food floor, from its advent to its closure, consumer convenience was paramount, as was supporting and showcasing local food producers while also stocking hard to find imports and a wide variety of ethnic foods. As Vancouver's premier food and destination shopping centre, local Vancouver residents were less likely to consider growing their own produce when Woodward's could offer variety, quality, and good prices.

Sources:

Woodwards Department Store. http://www.woodpensclub.com/WikiWoodward.htm
Cadwaladr, Margaret. (2020). Food Floor: My Woodward's Days. Langley: Madrona Books & Publishing.
Smith, M. G. (2021, May 24). "1136 Dollar forty-nine day, Woodward's," The British Columbia Review. Available at: https://thebcreview.ca/2021/05/24/1136-smith-cadwaladr-woodwards/

CHERRY TREES AND PACIFIC CRABAPPLES 1930s-1960s

In the early 1930s, the mayors of the Japanese cities of Kobe and Yokohama gifted to the Vancouver Parks Board 500 Japanese cherry trees. These flowering trees were intended to be planted at the Japanese cenotaph in Stanley Park honouring Japanese Canadians who had served in WWI. These cherry tree plantings left an immediate impression on Vancouverites who enjoyed the fleeting beauty of the early spring blossoms every year.

As the city's original plan for planted trees (elm, walnut, chestnut, acacia) grew in situ and into maturity some thirty years later, the city was finding by the 1950s these trees had not only substantial height and canopies, but roots which caused problems: the tree roots were upending sidewalks and interfering with public sewer system and private household water pipes.

To alleviate the pressures associated with new public infrastructure works created by maturing trees, the Vancouver Parks Board updated its boulevard and landscaping plan to introduce compact canopy and ornamental flowering fruit trees. The city opted to plant many more Japanese cherry blossom trees and, as supplies of trees could be limited, the city sourced other similar looking spring flowering trees.

A legacy of the city is that plum and Pacific crabapple trees were among those planted as a complement to the cherry trees, and so many Pacific crabapples can still be found in Vancouver neighbourhoods. While this tree was a favourite with early landscape planners, there were also already existing trees stewarded by Indigenous communities in the area who understood the capacity of Pacific crabapples to withstand drought as well as thrive in moist and less nutrient-rich soils.

In 1958, three hundred more cherry trees were donated by the Japanese consulate, a sign of friendship between the two nations, and in advancement of peace. These gifted ornamental cherries were planted along Cambie Boulevard, between 49th and 33rd Avenues, in Queen Elizabeth Park, and around the Japanese monument in Stanley Park. All other cherry blossom and flowering trees found in the city are part of the concerted landscape efforts by the Vancouver Parks Board. To this day, the Vancouver Parks Board is active in replacing diseased trees with a balance of compact spring flowering trees and larger canopy trees in order to reduce heat island effects in the city.

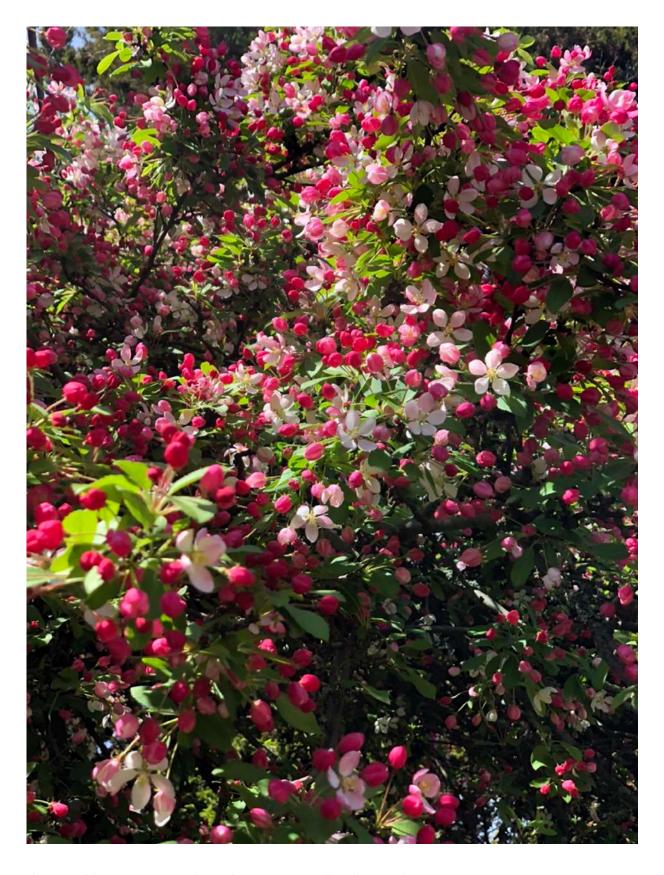


Fig. 37. Pacific Crabapple Hybrid, Spring 2022, McKenzie Heights Neighbourhood, Vancouver, B.C. Photograph by ©Sylvia Grace Borda, 2022.

THE UNIVERSITY OF BRITISH COLUMBIA (UBC) AND SIR ISAAC NEWTON TREES 1960s-1990s

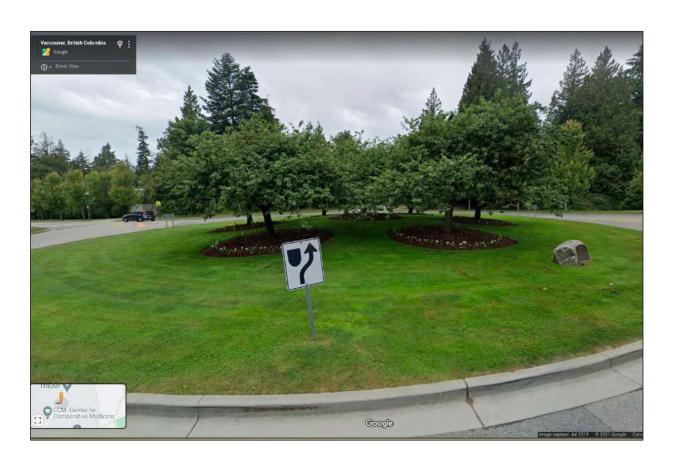


Fig. 38. Sir Issac Newton Trees, Hampton Place, South Campus, UBC. Source: Google Street View [Online]. Image capture July 2019. Ref: https://www.google.ca/maps/@49.2472155,-123.2315068,3a,75y,253.69h,85.5t/data=!3m6!1e1!3m4!1sWVLuwQS9l3Riy4V2HoO1jg!2e0!7i16384!8i8192

Sometimes special interest can be a driver for planting certain fruit trees. While it seems unusual that the department of Physics and Engineering at the University of British Columbia would be interested in apple trees, this was the case in the late 1960s.

The department was gifted a set of grafts of Flower of Kent, a traditional tree bearing cooking apples, that is reported to have descended from the same tree that Sir Isaac Newton sat under while pondering the role of gravity. These trees were meant to open up discussions around histories of Western scientific knowledge and demonstrate opportunities for new knowledge. The Flower of Kent apples are harvested every year by the university botanical gardens, which is part of a project to donate locally grown food products to community charities.

Of note, the grafted Flower of Kent apples gifted by the National Trust UK were planted and celebrated as part of the original TRIUMF, the national particle accelerating centre and nuclear physics and testing plant on campus. In time, a total of six apple trees were grafted into scions; these can still be found on campus.

Access to these trees, however, have changed in unexpected ways. The trees are now located on a road system, where before they were part of a landscaped area. In the 1990s, the university stepped in to intervene in saving the trees from a new road system being built alongside a series of condominium developments. The developers and the university agreed on a roundabout to protect the trees from removal. Thus these heritage trees were left untouched and continue to grow and fruit safely each year while local traffic passes around them.

UBC Apple Festival

Related to apples and public-facing education, UBC hosts a festival—established in 1991—celebrating and supporting local regional growers, as well as showcasing and introducing the public to the many varieties of different and historical apples grown in B.C.'s botanical gardens. The festival supports the sale of tried-and-true apple trees that are well suited to Metro Vancouver climates. There is also an apple identification clinic to help assist in identifying unknown backyard trees, as well as tasting sessions and garden workshops.

Related to student and public learning, a new 0.2 hectare orchard is to be planted at the UBC Botanical Garden in 2023-2025. The orchard comes from an established orchard on Bowen Island, the work of John and Jospehine Riley over a 30 year period that saw the couple plant and manage over 950 varieties of apples. UBC will graft and plant new stock from this orchard in order to produce a new teaching orchard for conservation, research, and preservation. Of note the current custodians of torchard, Christine Hardie and Rob Purdy, are donating all the grafts to establish this new UBC-based orchard - to be named the 'Riley' Orchard. It will take several years to set the grafted plants in the ground, and even more before they can begin fruit production. The integration of this new orchard system into Vancouver complements the UBC Botanical Garden Apple Festival celebration.

COMMUNITY ORCHARDS TO THE PRESENT

Spending time outside tending to vegetable and fruit crops, and nurturing these crops to harvest time, enabled communities to eat more fresh produce and become more self-sufficient. By promoting healthy habits and adding physical health benefits, community gardens can help boost morale by bringing communities together around a common cause.

The future sustainability of cities will require us to reconsider continued ways to grow food locally, to reduce travel miles, and help in our urgent need to promote healthy food, and mitigate climate change impacts on food security.

There are various types of community orchards in the City of Vancouver which can be visited. For example:

Community orchards attached to community gardens: The community garden participants care for the orchard and decide who has access to the fruit, as well as how the fruit is distributed and allocated. Community gardens along the Arbutus Greenway corridor are tended by residents.

Community orchards in public parks: Community-run orchards located in public parks are accessible to the general public. Maintenance and care of this type of orchard is the responsibility of community orchard stewards.

Community orchards for food, learning, and healing: Community orchards as centres for local ecological knowledge and learning. Norquay community food forest is an example of a native plant food forest that integrates permaculture design and the traditional ecological knowledge of Indigenous communities. The Norquay Food Forest is part of the Renfrew-Collingwood food justice network and the wider <u>Vancouver Neighbourhood Food Networks</u> which aim to amplify and empower the voices of underrepresented communities in the local food system.

Fruit trees planted along pedestrian routes: Trees are planted along pedestrian routes where there is space on public land. The fruit is available to everyone and easily accessible to passersby. These trees are planted and maintained by the City. Information about street trees is available in the City of Vancouver street trees database. The street tree dataset includes a listing of public trees on boulevards in the City of Vancouver and provides data on tree coordinates, species, and other related characteristics. Park trees and private trees are not included in the inventory.



Fig. 39. Native fruit grown by the Norquay Food Forest community: Thimbleberry, blueberry, salmonberry. Web image credit: Norquay Community Food Forest https://rcfood.wordpress.com/norquay-orchard/ [Accessed October 28, 2022].

Nursery Native Gardens and Conservation

The establishment of such community orchards locally and at scale are making a real impact. There are also world community examples which can offer sustainable pathways for cities like Vancouver to inspire or re-imagine urban food forests and stewardship. However, this would need to be done in good relationship with local First Nations communities.

Necochea Ciudad Frutal group (Argentina) is a self-managed community group that recognised local civic regulations permitted residents to plant their own front yard civic trees. The group, started in 2009, has planted 500 fruit trees in public spaces with the help of residents throughout the city of Necochea in the Buenos Aires Province. The group's goal is for the city to become a self-sufficient food forest of fruit trees accessible to anyone to harvest and to feed themselves.

Incredible Edible Todmorden (England) - In the small and rural town of Todmorden in West Yorkshire, England, locals are part of a community movement to produce and support production of food from across more than 80 sites with the goal of increasing self-service vegetable and fruit picking areas in public spaces. The locals grow fruit, herbs, and vegetables around Todmorden for everyone to share. The community also offers public cookery demonstrations, tastings of heritage foods, organise and run a Harvest Festival, are part of the UK Food Sovereignty Gathering, and organise dementia-friendly training to increase the participation of vulnerable individuals to be part of city food growing.

In the U.S., the **Community Fruit and Nut Tree stewardship** is promoted and prompts communities to start their own food forests in public spaces through the "Trees by Mail Program". This non-profit initiative enables anyone who can use publicly accessible spaces to plant fruit trees wherever trees are most likely to flourish. The project's criteria is that trees will be provided to folks who will plant them in locations that will reach people who might not otherwise have access to fresh, nutritious fruit. These locations should be highly visible in order to inspire and positively influence people to plant more trees in their own private business and home spaces. Trees are sent at no cost and each participant can have an expert offer support over telephone, email, or in the local community.

Falling Fruit is another U.S. non-profit; they collect tree inventories compiled by cities, universities, and other institutions which document trees with the intention of assisting with their care. Falling Fruit data mines these sets for food-producing species and produces useful maps that are embedded in Google Street Maps. The website provides an international and searchable map of fruit trees and other edible trees and shrubs. Falling Fruit has imported data sets, including the Vancouver Park Board's own tree inventory that provides citizens with an overview of where to find edible foods for foraging within city corridors.

The City of Vancouver also has its own food forest map of orchards and trees.

Links:

Arbutus Greenway https://vancouver.ca/streets-transportation/arbutus-greenway.aspx
Copley Community Orchard, located near Nanaimo Skytrain, Vancouver.

http://www.copleycommunityorchard.com/

City of Vancouver Street Trees - https://opendata.vancouver.ca/explore/dataset/street-trees/information
Norquay Community Food Forest https://rcfood.wordpress.com/norquay-orchard

Necochea Ciudad Frutal group (Argentina) https://www.thehindu.com/sci-tech/energy-and-environment/this-argentine-city-has-turned-sidewalks-into-orchards/article26886826.ece

Incredible Edible Todmorden (England). https://www.incredible-edible-todmorden.co.uk/projects

Trees by Mail Program https://www.robgreenfield.org/communityfruittrees/

Falling Fruit https://fallingfruit.org

City of Vancouver Food Tree Map https://opendata.vancouver.ca/explore/dataset/community-gardens-and-food-trees/map/?location=12,49.26825,-123.1382

10

CONCLUSION

In researching Vancouver fruit histories, it has been discovered that Vancouver has been defined by many diverse influences which have shaped its relationship to fruit cultivation and production. Designed as an early settler destination millennia of Coast Salish Peoples' knowledge and food systems were ignored and often destroyed with the colonial regimes of property displacing local First Nations from these productive lands abundant with fruit trees and bushes.

The city built up as a natural distribution hub with the forced relocation of First Nations onto reserve lands, away from the deep sea and shallow valleys suited to infrastructure. Here, sea ports, railways, and transport corridors were used to import more goods than they locally produced. Often ignored perspectives on these histories give evidence that the City of Vancouver is also shifting to a different reliance, informed by proven models of resilience and the sustainability of Indigenous Knowledge. The City itself is slowly moving toward growing and sharing food by including community gardens and orchards in urban planning. There are also programs to promote the planting of trees and shrubs through its tree buying programs, as well as offering residential grants which enable the public to buy and plant their own edible tree (nuts, fruit, berry bushes, etc.) at cost.

A recent article by journalist Michelle Gamage for *The Tyee* (August 2022) describes a fruit collection event organised by the Vancouver Fruit Tree Project and ponders what else could be achieved by the City if it continued to embrace a program of food forests.

The main goal is to move toward a more self-sufficient, sustainable city, one that can improve the overall health and well-being of residents and the natural environment through the support of Indigenous knowledge.

Indigenous knowledge, in terms of perspectives of place, held by First Nations communities is one where everything is interconnected, including people's ongoing relationships to their ancestral lands. These relationships are understood through stories, lived experiences, and ongoing observation and engagement with land. This continuum of managing a balance between honouring and sustaining nature in a time of reconciliation and climate can be re-established, as we've seen in the above examples, for cities of today and of the future.

It's now up to all of us to make these steps an integral part of our home environment and neighbourhoods through small and large actions. What is possible—anything and everything!

Pacific Crabapple Day, for example, was established as part of the partnership between the Vancouver Fruit Tree Project and Coast Salish Plant Nursery. This inaugural event was celebrated on Saturday, October 29th, 2022 at Maplewood Flats in North Vancouver. The day included First Nations speakers, including Tsleil-Waututh leader Les George, who opened the event and reinforced the importance of the Pacific crabapple to Coast Salish communities.

Coast Salish artist Ocean Hyland's Pacific crabapple artworks were also launched and shared with the audience. The artworks represent the Pacific crabapple in its two most prominent states: flowering and fruiting.

Talks by the Wyss family—Senaqwila Wyss, T'uyt'tanat Cease Wyss, and Kultsia Barb Wyss— focused on the role of the Pacific crabapple in Coast Salish communities from past generations to present. Kultsia Barbara Wyss emphasized the importance of the Pacific crabapple as an early blooming spring fruit tree that provides much needed nectar for mason and bumble bees. Additionally, she mentioned that the wood of the Pacific crabapple is an important hard wood used by Coast Salish peoples to hold and mount tools, and is whittled down to form pins and pegs to hold house boards for building construction.

Rounding out the day was a discussion about the Vancouver Fruit Tree Project's (VFTP) interest in promoting and celebrating the Pacific crabapple. This discussion followed the words of Indigenous horticulturalist Gordon Brent Brochu-Ingram, who spoke about traditional management and propagation of Pacific crabapples.

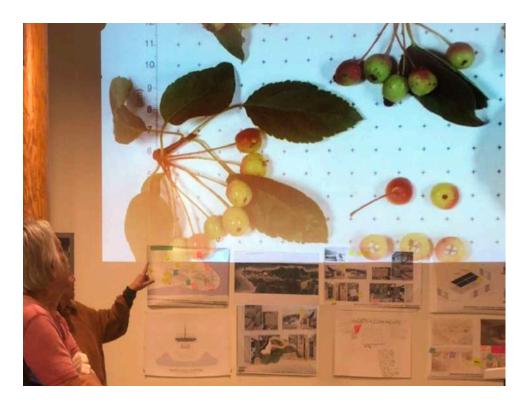
The VFTP emphasised understanding the importance of the Pacific crabapple as a plant long-utilized by Indigenous peoples. The VFTP hope the wider public can recognise and learn about the tree and its cultural roots through events like the Pacific Crabapple Day, and through this, a greater respect can be established between Indigenous and non-Indigenous communities. Respecting our natural environment and flora are key to creating bonds of respect between communities, and in doing so, creating more resilient and biodiverse settings as we work together to address shared challenges of climate change and biodiversity loss.



Les George being introduced by Irwin Oostindale, welcoming attendees to the first annual Pacific Crabapple Festival Day at Maplewood Flats. Photograph by Sylvia Grace Borda, 2022.



Preparing to share the Pacific crabapple Coast Salish artwork and designs by Ocean Hyland with festival attendees, 2022.



Kultsia Barbara and T'uy't'tanat Cease Wyss sharing traditional Indigenous knowledge and stories about the importance of the Pacific crabapple to their family. Photograph by Sylvia Grace Borda, 2022.



Sylvia Grace Borda spoke about her research on behalf of VFTP in raising further awareness among non-Indigenous communities to protect and recognise the Pacific crabapple within the urban environment. Photograph by Frances Lew, 2022.



Screenshot of Gordon Brent Brochu-Ingram addressing the festival attendees via Zoom, reinforcing the importance of understanding Coast Salish flora histories and the stewardship of Coast Salish plant ecologies. Photograph by Sylvia Grace Borda, 2022.

See: https://vancouver.ca/people-programs/growing-food.aspx.

See: https://thetyee.ca/News/2022/08/10/Eating-Ethically-Affordably-Vancouver-Fruits-Berries

CONNECTING FRUIT TREE HISTORIES THROUGH ART

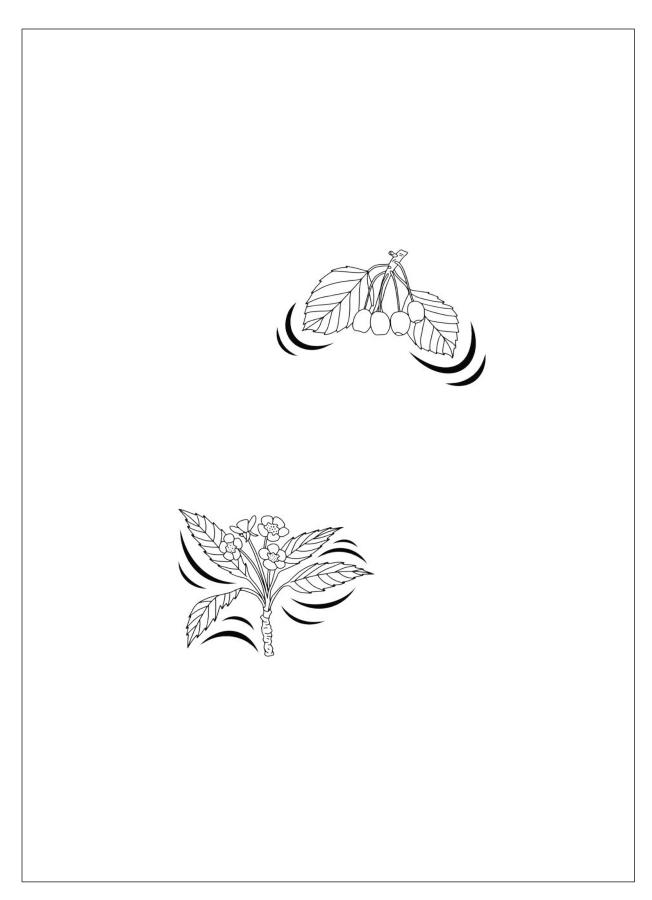
In this section the power of art to ground and connect how we can see and understand our fruit tree histories has been interpreted by two contemporary artists.

Ocean Hyland, Artist

Ocean Hyland is an artist who works in the realms of painting and digital design. Along with her practices, she enjoys participating in language revitalization of Coast Salish languages. Ocean currently lives in Qualicum Bay on Vancouver Island.

As a young woman, Ocean received the ancestral name ts;simtelot, which was shared with her by her mother. This name has been passed down through her family on her Cheam side. On her matrilineal side she is Tsleil-Waututh, Squamish, Cheam, Hawaiian, and Chinese. Through her father she is Scottish and Irish. The richness and diversity of her cultural heritage is what inspires Ocean in her many art practices.

Ocean has studied at both the Native Education College, specializing in NWC jewelry arts, and at Simon Fraser University, focusing on the skwxwú7mesh sníchim, building up her proficiency in one of her mother tongues. She has also gained valuable knowledge apprenticing with creators Zachary George and Aaron Nelson Moody.



Pacific crabapple (flower and fruit) by $^{\hbox{\scriptsize 0}}$ Ocean Hyland, 2022.

Sylvia Grace Borda, Climate Artist

What first started as an independent arts project evolved through an invitation by the Vancouver Fruit Tree Project to speak and to later write about the City of Vancouver's fruiting trees.

As a climate artist, I strongly believe in the role of the visual arts in facilitating civic dialogue, cultural memory and becoming part of nature-based solutions. My experiences in attempting to produce artworks about Metro Vancouver's fruit tree histories is so they could start dialogue about cultural and natural spaces, and as a possible way to decolonise our settler notions of what they know about the places they call home. Even less understood is the role of understanding natural histories in potentially helping to address wider climate challenges.

As an art-environmental researcher, I am always aiming to better comprehend the context of what is present, what has been, what is misunderstood or just not represented. The research time is as important as the intended artworks. Through this dual approach of artist and researcher, I hoped to better understand the uniqueness of fruit trees in Metro Vancouver and to connect with their stories of place and time.

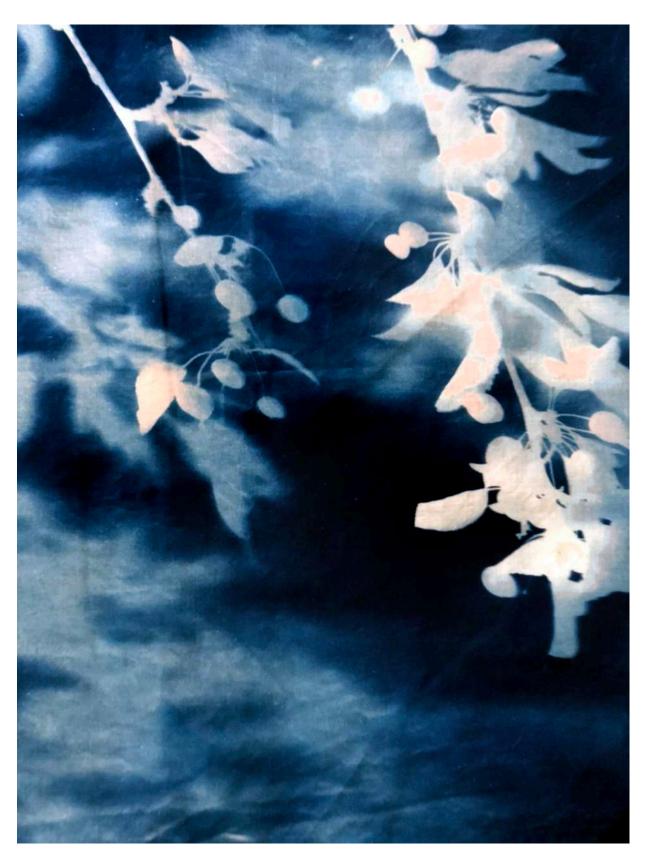
My first artwork (2019 to present) is about fruit trees produced as a series of photograms where objects are directly recorded on a photographic paper and through the cyanotype process turns the paper into a blue tinted print. In this ongoing work, I consider the fruit trees to be the immediate connection between Nature and us as viewers. In the photogram process the trees, sun, and refracted light through the leaves are recorded by daylight to create volumetric x-ray like images. These large-scale photograms are created in the landscape – no plants have been cut or trimmed, rather the cyanotype photographic papers have been placed in and around the contours and natural shape of the trees. Historic photography has leaned towards the scientific tasks of collecting, sampling and removing materials from their environment and re-staging these in the studio. These artworks consider Nature as it is, connected, and in situ.

Innovations of early photographic image-making and reflections on land use from 1880-1920 are linked to a time when cyanotype photography was also gaining momentum as a Western scientific medium. This endeavour made me think about the experience of photography not simply as a set of mechanical devices capturing an image but as a process inherently linked to the observer and grounded in physical surroundings. I could not complete the project without being in situ. It was essential to be able to observe the real-time exposure of the cyanotypes process and the slow revealing of the tree images as they were developed. In this way, these photographic outcomes moved beyond process and became a way to more intimately reflect on the mode of place and the social histories associated with the locations. What could these trees tell about themselves or the peoples and other histories associated with them?

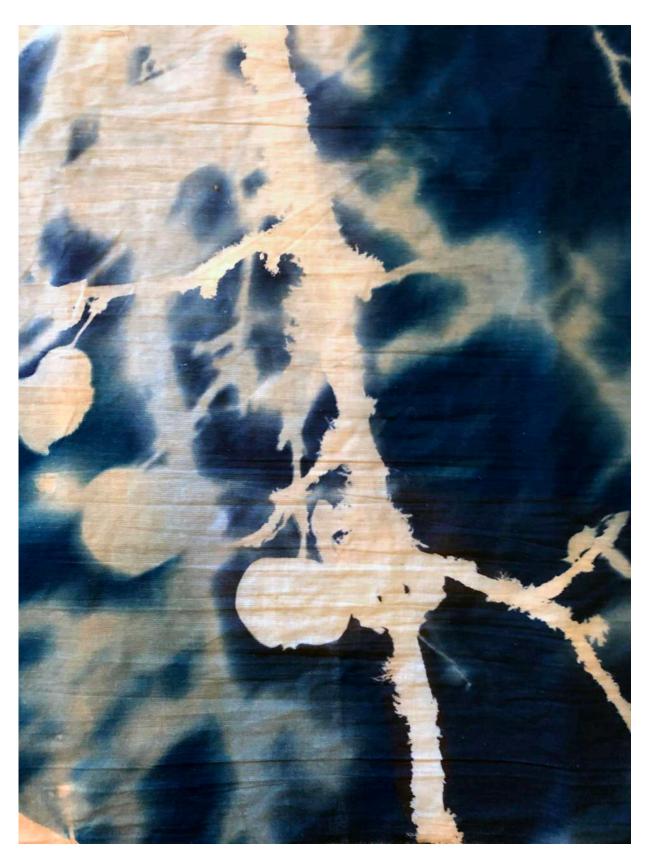
In undertaking studies of older mature fruit trees in Metro Vancouver, I attempted to explore wider aspects of histories, for example, how fruit trees are experienced by and speak to traditional knowledge, different cultural uses and needs. I hoped to produce a set of striking photograms concerned with both the historical (non-digital) process of photography and how it can empower viewers to engage in a complex set of histories of Indigenous and then settler land use.

Pacific crabapple trees and other heritage varieties tend to appear more weathered and less uniform than commercial fruit-bearing trees.

By moving away from addressing commercial fruit production to profile ecological knowledge and natural trees in situ, this way of seeing provided opportunities to expand and articulate the project's potential to address complex binaries of stewardship. The artworks themselves have evolved into lenses on land use representing a tension between photography—apparatus-based observation—and human observation, as well as between the act of recording and the interpretation of food systems



Pacific crabapple, Vancouver. Photogram © Sylvia Grace Borda, 2022.



Heritage Apple with moss growing on limbs. Photogram © 2022 by Sylvia Grace Borda. Heritage fruits are considered either trees that are planted from more than 60 years ago (prior to 1954) or cultivars of historical significance that were grown in the past, without the interference of genetic modification or hybridization.

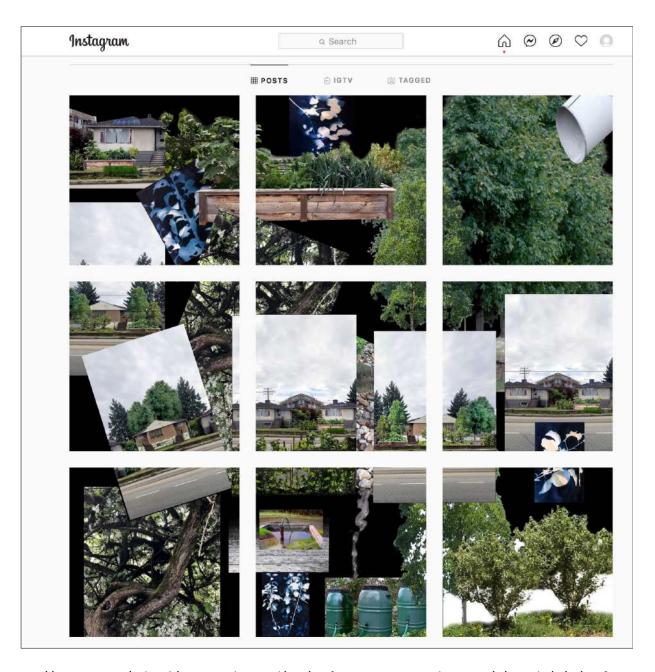


Pacific crabapple, Darts Hill Garden Park, Surrey, B.C. Photogram ©Sylvia Grace Borda, 2021.

and changing histories. These images are also metaphorically speaking about passages of time and shed some light on the story of Pacific crabapple and the shift to colonization, settlements, and different agricultural practices.

My fruit tree art research further led to a second visual art series to consider how the city might be animated by Nature-based approaches to make us better connected to place. These are lessons rooted already strongly in local traditional knowledge for millennia—and we need to respectfully become an ally to these knowledge. What if fruit trees were a primary part of the fabric of cities as they have been historically stewarded by local traditional knowledge holders? Can we extend this knowledge to bring together communities? As an artist and researcher, I'm often using a 'what if' lens to address how cities can support these alliances—for example, encouraging more proactive ways to conserve water supplies, shifting processes towards a more green community, with residents as custodians.

What if we could transform residential lawns to become active food gardens—what if more fruit trees are planted to create continuous urban orchards across residential lots. What if we could all benefit from extended eco-urban and food corridors, rain harvesting, and areas to shelter or offset heat islands during extreme summer climate variances.



C40 Cities Instagram series by Sylvia Grace Borda, 2022. This series of montages were created as a commission at the invitation of C40 Cities (https://www.c40.org/tag/women4climate/), who invited me to respond to envisioning Vancouver in the next decade. The artwork is accessible on the C40 Instagram account (https://www.instagram.com/c40cities/) and can also be found here: https://www.instagram.com/p/CSv4FH2K4d7/

C40 CITIES INSTAGRAM SERIES IMAGE DESCRIPTIONS

Images: Bottom Row:

Pacific crabapple trees are present throughout the City of Vancouver. These native apple trees offer food and habitat to birds and other wildlife. What if we could plant more Pacific crabapple trees and involve all people in partnership as allies in a learning dialogue about their importance to First Nations people as food, medicine, and family? What if the city could be used as a place to grow most of our basic food supply? What if we could also plant other types of fruit trees throughout the city and harvest these sustainably, allied with traditional knowledge holders and supported by communities? As the climate shifts to higher temperatures and heat spikes, we also need more ways to sustainably store water. What if we empowered local residents to become stewards of water storage with the use of backyard and laneway rain barrels?

Images: Middle Row

Taking inspiration from the 19th century children's card game "Myriorama," where one can arrange and rearrange tall vertical picture cards of houses, roads, trees, and other images to create a continuous panorama, I have created my own endless green cityscape. By representing archetypal, older Vancouver homes (built in the 1950s-70s) which are usually characterised by wood frames, southern facing windows, and foundational plantings (i.e. plants placed near the house perimeter), I have transformed house lawns and reshaped them into sites of natural density—"rewilding". These residential areas can become the grass roots place where climate adaptation can happen to improve communities, neighbourhoods, and, by extension, city environments, in the face of urban heat stress and global climate impacts.

See: https://www.weforum.org/agenda/2021/06/cities-ecosystems-biodiversity-climate-change/)

Images: Top Row

The planting of garden vegetable boxes can offer a wide variety of seasonal food immediately available to communities. Such efforts to plant

numerous boxes throughout each home front could result in hundreds of kilos of food produced for neighbourhoods and reduce transportation (and spoilage) of food goods into city centres. What if more cities could feed themselves and be destinations to experience nature? Indeed, the inclusion of green spaces for walking, sitting, and reflection in neighbourhoods is known for its measurable therapeutic benefits, too.

See: https://www.weforum.org/agenda/2021/05/nature-green-space-urban-cities-exercise-fresh-air/

Both series of artworks explore ideas of how cities, histories, and communities can work toward a shared and renewed future, co-created together with nature through an understanding of what has been, what is, and what can be.

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Rié Hirai, Marta Stencil

CONTRIBUTOR BIOGRAPHIES

Sylvia Grace Borda, Researcher, Writer and Artist

Sylvia Grace Borda is the founder of Climate Arts for Resilient Environments (C.A.R.E). She is a Women4Climate Fellow, and an advocate of the arts in supporting sustainable built and natural environments.

Sylvia is also an award-winning artist and writer recognised in Canada and abroad for her exploration of photography and eco-art works often produced in the context of community engagement and sustained social benefit. Her research practice involves contextualising the tangible and intangible cultural heritage that make up our world. She has been an artist in residence at Kwantlen University, Canada; University of Stirling, Scotland, and an Associate researcher (2008-2013) at Emily Carr University of Art and Design (Canada). She humbly works with communities as an ally for reconciliation and self-representation. Recently, Sylvia was honoured to collaborate with Indigenous Oromo communities in Ethiopia to help bring their voice to COP26 about traditional ecological knowledge and regenerative food and agroforestry systems.

Sylvia lives and works on the unceded territories of the x™məθk™əyʻəm (Musqueam), Skwxwú7mesh (Squamish), and Selílwitulh (Tsleil-Waututh) Nations.

Her projects can be viewed at: http://sylviagborda.com.

Gordon Brent Brochu-Ingram, Ethnobotanist and Indigenous Advisor

Gordon Brent Brochu-Ingram is an environmental planner and landscape ecologist. He is Métis, an Indigenous community across the middle latitudes of Canada, and grew up in a WSÁNEĆ (Salish) community on Vancouver Island. Along with the late Latina activists Yolanda Retter and Anne-Marie Bouthillette, Brent developed and edited the first survey of LGBT public space and urban design issues, Queers in Space: Communities, Public Places, Sites of Resistance (1997). Over two decades, Brent studied, conducted research, and taught at the University of California, Berkeley College of Environmental Design where he completed his doctorate. He has also taught at the universities of British Columbia and Victoria, and at George Mason University where he was an Associate Professor / Dean. Most of his work has been on Indigenous legacies in landscapes and First Nations reasserting stewardship over public space, territories, cultural sites, and protected areas. As part of a small group, focused on the islands around the Salish Sea between Vancouver, Canada and Seattle, Washington, Brent combines monitoring cultural landscapes and local biological diversity, making and writing about site-based environmental art, and related planning and design theorizing. He is an appointee to the agricultural commission of local elected government. A recipient of a Lambda Literary Award, Brent has received support from the Graham Foundation, the Canada Council for the Arts, and the British Columbia and Yukon arts councils.

Catherine Friesen, Writer and Editor

Catherine Friesen is a writer and editor living on the unceded territories of the S'ólh Téméxw (Stó:lō), Semiahmoo, Kwantlen, and Nuxwsa'7aq (Nooksack) First Nations. Catherine holds a BA in both Psychology and Creative Writing from the University of the Fraser Valley, a B.Ed. from Simon Fraser University, and is currently training to become an art therapist through the Kutenai Art Therapy Institute.

Ocean Hyland, Artist, Coast Salish artwork: Pacific crabapple design

Ocean Hyland is an artist who works in the realms of painting and digital design. Along with her practices, she enjoys participating in language revitalization of Coast Salish languages. Ocean currently lives in Qualicum Bay on Vancouver Island.

As a young woman, Ocean received the ancestral name ts;simtelot, which was shared with her by her mother. This name has been passed down through her family on her Cheam side. On her matrilineal side she is Tsleil-Waututh, Squamish, Cheam, Hawaiian, and Chinese. Through her father she is Scottish and Irish. The richness and diversity of her cultural heritage is what inspires Ocean in her many art practices.

Ocean has studied at both the Native Education College, specializing in NWC jewelry arts, and at Simon Fraser University, focusing on the skwxwú7mesh sníchim, building up her proficiency in one of her mother tongues. She has also gained valuable knowledge apprenticing with creators Zachary George and Aaron Nelson Moody.

Irwin Oostindale, *President*, Wild Bird Trust of B.C.

Irwin Oostindie is a Dutch settler working for redress in public arts and land-use policy. He is President of the Wild Bird Trust of B.C. which operates the Coast Salish Native Plant Nursery, a social enterprise operating from Maplewood Flats on Tsleil-Waututh lands. He holds an MA in Communications from SFU researching how reconciliation functions as spectacle. He has a Post-Graduate Certificate in Media Arts from Capilano University. He is an Associate of SFU's Institute for the Humanities and a graduate student at SFU Urban Studies.

Honey Mae Caffin, Graphic Designer, Wild Bird Trust of B.C.

Honey Mae Caffin is Communications Manager at Wild Bird Trust of B.C. She is a first-generation, Filipino (Waray/Ilonggo) settler on unceded territories of the Musqueam, Squamish, and Tsleil-Waututh First Nations. She is a graphic designer and creative technologist with a focus on nature conservation and regeneratative agriculture. She works with individuals and organizations who advocate for and protect the rights of migrant workers, Indigenous peoples, and the conservation of ecological biodiversity centered on traditional ecological knowledge.

Senaqwila Wyss, Programs Coordinator, Wild Bird Trust of B.C.; Ethnobotanist and Indigenous Advisor

Senaqwila Wyss is the Wild Bird Trust of B.C.'s Programs Coordinator. She is an ethnobotanist who was trained traditionally by her mother, T'uyt'tanat Cease Wyss. Senaqwila is Skwxwú7mesh, Tsimshian, Sto:lo, Swiss, and Hawaiian. She has been working at the Wild Bird Trust for over six years and, together with her mother, founded Raven and Hummingbird Tea Co., where they share their knowledge and love for Indigenous plants broadly.

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Vancouver Fruit Tree Histories and Communities profiles the unique story of fruit trees in the City of Vancouver which have shaped the City's urban growth and residential green spaces and importantly reflecting the diverse community Indigenous and settler histories which have been integral to this narrative.

Vancouver Fruit Tree Histories and Communities also represents a multi-community collaboration of the Vancouver Fruit Tree Project and the Coast Salish Plant Nursery, writers, Sylvia Grace Borda, Catherine Friesen and Gordon Brent Brochu-Ingram, knowledge holder, Senaqwila Wyss, and many supporting community organisations. It is hoped that through this publication on the history of fruit trees in Vancouver and through learning about the Pacific Northwest's only native fruit, the Pacific crabapple (*Malus fusca*), the Indigenous histories interwoven with the City of Vancouver's planning and settlement can offer an important place from which to start to become aware of shared connections and opportunities for knowledge sharing.

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Cover photo: KÁ,EW [SENĆOŦEN], Qwa'up-ulhp [Hul'q'umi'num'], Malus fusca, Beaver Point, Salt Spring Island 2019 August 19 P8190006 photograph by Gordon Brent Brochu-Ingram.

While this Pacifc crabapple is pictured in Salt Spring-the position of such trees by the seaside would have been how these trees would be found in Metro Vancouver and maintained by Coast Salish families prior to settlement and urbanisation.