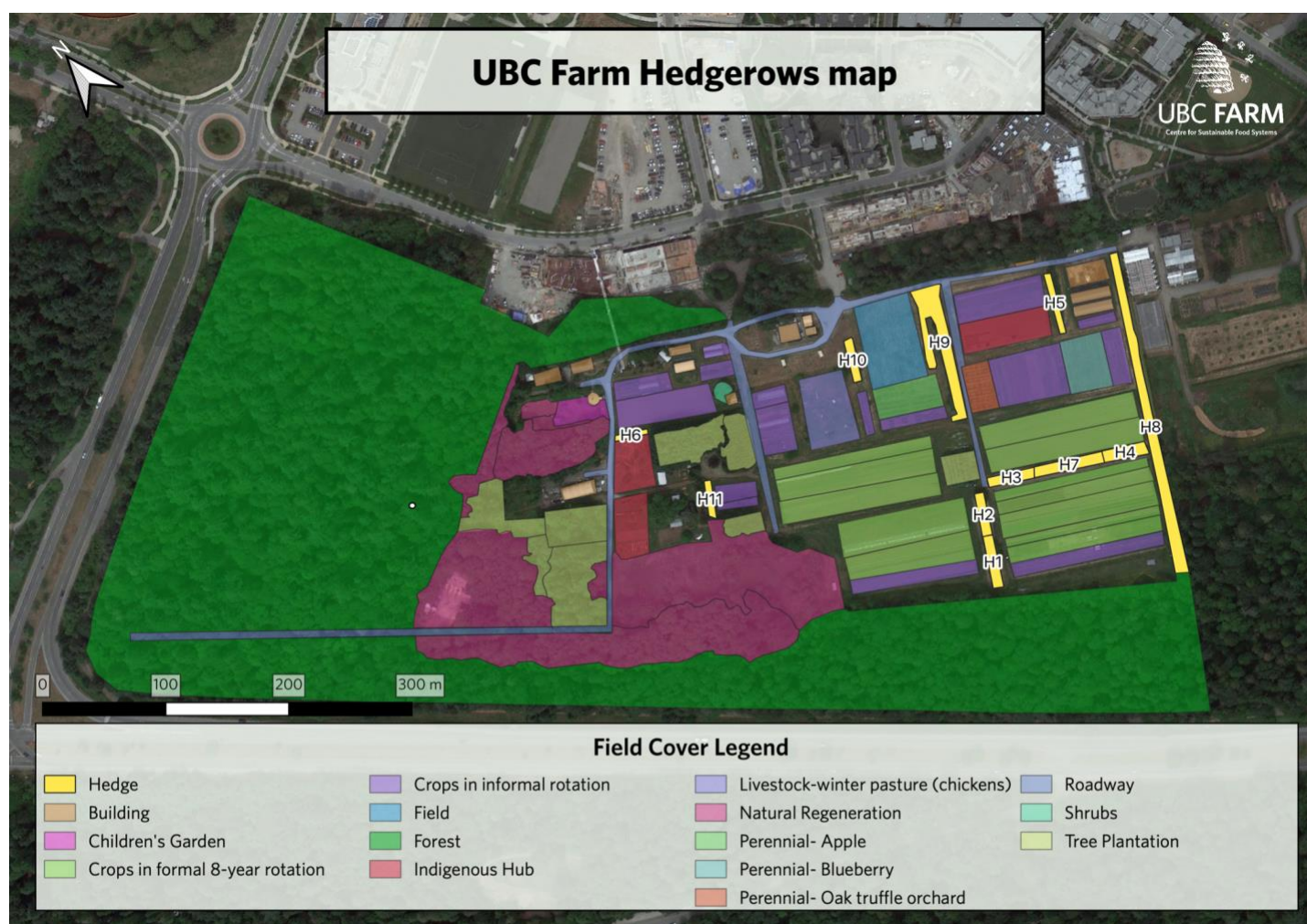


This document aims to present a summary of the history of each of UBC Farm’s major hedgerows, as well as the design, intended purpose, and known species present in each hedgerow.

### History of the UBC Hedgerows

In 2006 and 2007, UBC student Antonin van der Lely established four hedgerows (H1, H2, H3, H4) at UBC Farm as part of his directed studies. Then, in 2009 and 2010, another student, Andrea Morgan, followed up with additional species and management notes for her own directed study for the same four hedgerows. In 2018, hedges H1-H6 were mapped by Lal Deniz Basok and Janela Eunice Sanqui under the supervision of Mel Sylvestre (UBC Farm Perennials Coordinator). The remaining hedgerows (H7-H11) were informally established between 2007-2020 and classified as hedgerows in 2020.



# H1

Established by: Undergraduate students Antonin van der Lely (2007/2008) and Andrea Morgan (2009/2010)

Purpose: Windbreak for fields D7 and D4.; increase wildlife habitat and ecological capacity; soil quality building

Species and design:

This hedge runs north/south. Initially in 2007 it contained 4 species: one paper birch (*Betula papyrifera*); two red alders (*Alnus rubra*); one unhealthy noble fir (*Abies procera*); and clusters of unidentified non-native raspberries. The soil was very moist, and the high shade from the trees provided extended hours of frost, or a “cold pocket”. The shade provided by both the forest and the primary trees led to Andrea Morgan planting various shade-favouring species, such as black huckleberry here in 2010. Additionally, alders fix nitrogen readily to improve soil quality.

As of 2010, the known species in this hedgerow include:

1. *Abies grandis* - grand fir
2. *Acer macrophyllum* - red alder
3. *Acer circinatum* - vine maple
4. *Betula papyrifera* - paper birch
5. *Camus stolonifera* - red-osier dogwood
6. *Physocarpus opulifolius* - ninebark 'Center Glow’
7. *Rubus* spp. - raspberry
8. *Salix sitchensis* - sitka willow
9. *Spiraea douglasii* - hardhack/ Douglas spiraea
10. *Tilia cordata* - linden 'Greenspire'
11. *Vaccinium membranaceum* - black huckleberry
12. *Vaccinium ovatum* - evergreen huckleberry

A survey of this hedgerow was conducted in 2018. See details in Appendix 1.

## H2

Established by: Antonin van der Lely (2007/2008) and Andrea Morgan (2009/2010)

Purpose: Windbreak for D7 and D4.; medicinal, culinary, and First Nations cultural significance; market sale

Species and design:

This hedge also runs north/south. A mixture of wild and cultivated native species are in competition here, namely among gooseberries, red huckleberries, and blackberries. Non-native species are planted here for the purposes listed above, such as Viburnum and the aesthetic flowers for-market it produces. Cascara, red flowering currant, and tall Oregon grape are species of medicinal, culinary, or Indigenous cultural importance in H2.

As of 2010, the known species in this hedgerow include:

1. *Acer macrophyllum* - bigleaf maple
2. *Betula papyrifera* - paper birch
3. *Camus stolonifera* - red-osier dogwood
4. *Forsythia x intermedia* - forsythia 'Northern Gold'
5. *Holodiscus discolor* - oceanspray
6. *Physocarpus capitatus* - Pacific ninebark
7. *Rhamnus purshiana* - cascara
8. *Ribes sanguineum* - red flowering currant
9. *Ribes* spp. - gooseberry
10. *Rubus spectabilis* - salmonberry
11. *Rubus* spp. - raspberry
12. *Salix scouleriana* - scouler's willow
13. *Sambucus caerulea* - blue elderberry
14. *Sambucus racemosa* spp. pubens - red elderberry
15. *Symphoricarpos albus* - snowberry
16. *Sorbus sitchensis* - sitka mountain-ash
17. *Tilia cordata* - linden 'Greenspire'
18. *Vaccinium ovatum* - evergreen huckleberry
19. *Viburnum plicatum* - viburnum 'Summer Snowflake'

A survey of this hedgerow was conducted in 2018. See details in Appendix 1.

## H3

Established by: Antonin van der Lely (2007/2008) and Andrea Morgan (2009/2010)

Purpose: Experimentation; food and ornamental crops

Species and design:

This hedge runs east/west and is the most diverse of the hedgerows. A mixture of both native and non-native species comprises H3. The narrow strip restricts crop density, and lack of perennial grasses potentially reduces the room for pests such as click beetles and wireworms to populate the hedges. The lack of shade and full sun exposure (10+ hours/day in summers) limits further the species available. However, some of the trees planted in the southern edge provide low levels of shade to the northern side; as the trees are relatively immature, as they grow shade will improve slightly. Due to limits of shading the production fields immediately north of H3, most species are herbaceous woodies and ground covers. Oregon grape, Saskatoon berry, hazelnut, and crabapple are some examples of native food crops.

As of 2010, the known species in this hedgerow include:

1. *Abelia grandiflora* - glossy abelia
2. *Amelanchier alnifolia* - serviceberry / Saskatoon
3. *Berberis thunbergii* - barberry 'Cherry Bomb'
4. *Camus stolonifera* - red-osier dogwood
5. *Corylus cornata* var. *californica* - beaked hazelnut
6. *Ficus* spp. - fig 'Brown Turkey '
7. *Forsythia* x *intermedia* - forsythia 'Northern Gold'
8. *Mahonia aquifolium* - tall Oregon grape
9. *Malus fusca* - crabapple
10. *Philadelphus lewisii* - mock orange
11. *Physocarpus opulifolius* - ninebark 'Center Glow'
12. *Ribes nigrum* - black currant 'Crandall '
13. *Ribes rubrum* - red currant
14. *Ribes sanguineum* - red flowering currant
15. *Rosa gymnocarpa* - baldhip rose
16. *Rosa nutkana* - Nootka rose
17. *Sambucus cerulea* - blue elderberry
18. *Symphoricarpos albus* - snowberry
19. *Vaccinium corymbosum* - blueberry

A survey of this hedgerow was conducted in 2018. See details in Appendix 1.

## H4

Established by: Antonin van der Lely (2007/2008) and Andrea Morgan (2009/2010)

Purpose: Educational, demonstrational, comparative usages.

Species and design:

This hedge runs east/west and is the most reflective of typical BC hedgerows. Species were picked based on Delta Farmland and Wildlife Trust's responsible land stewardship recommendations. Native species include hazelnut, hawthorn, crabapple, and thimbleberry, among others; and interspersed rarely are non-native species, primarily for filling out height. These include fig and ninebark cultivar. H4 contains the worst soil of the four hedgerows, but the species planted are hardy and shouldn't have much trouble thriving here regardless.

As of 2010, the known species in this hedgerow include:

1. *Amelanchier alnifolia* - serviceberry / Saskatoon
2. *Cornus stolonifera* - red-osier dogwood
3. *Corylus cornata* var. *californica* - beaked hazelnut
4. *Crataegus douglasii* - black hawthorn
5. *Ficus* spp. - fig 'Brown Turkey '
6. *Mahonia aquifolium* - tall Oregon grape
7. *Malus fusca* - crabapple
8. *Philadelphus lewisii* - mock orange
9. *Physocarpus capitatus* - Pacific ninebark
10. *Physocarpus opulifolius* - ninebark 'Center Glow '
11. *Rosa gymnocarpa* - baldhip rose
12. *Rosa nutkana* - Nootka rose
13. *Rubus parviflorus* - thimbleberry
14. *Symphoricarpos albus* - snowberry

A survey of this hedgerow was conducted in 2018. See details in Appendix 1.

## H5 (Bee hedgerow)

Established by: [Unknown]

Purpose: Bee foraging

Species and design:

This hedgerow, running north/south, contains many of the same species as the other hedges, with some herbaceous additions for bee foraging.

As of 2018, the known species in this hedgerow include:

1. *Malus fusca* - crabapple
2. *Betula papyrifera* - paper birch
3. *Salix sitchensis* - sitka willow
4. *Physocarpus capitatus* - Pacific ninebark
5. *Sambucus racemosa* spp. *pubens* - red elderberry
6. *Cornus sericea* - red-osier dogwood
7. *Ribes sanguineum* - red flowering currant
8. *Lonicera involucrata* - Black Twinberry
9. *Mahonia aquifolium* - tall Oregon grape
10. *Symphoricarpos albus* - snowberry
11. *Rubus spectabilis* - salmonberry
12. *Rosa nutkana* - Nootka rose
13. *Lupinus polyphyllus* - Large-leaved Lupin

A survey of this hedgerow was conducted in 2018. See details in Appendix 1.

## H6 (Indigenous hedgerow)

Established by: Indigenous medicine collective, Nature Vancouver Bird Watchers, and xʷc̓ic̓əsəm garden members (2014).

Purpose: Teaching; medicinal

Species and design:

This hedgerow, running east/west, contains various plants with medicinal and other Indigenous cultural significance, as chosen by members of local Indigenous communities.

As of 2018, the known species in this hedgerow include:

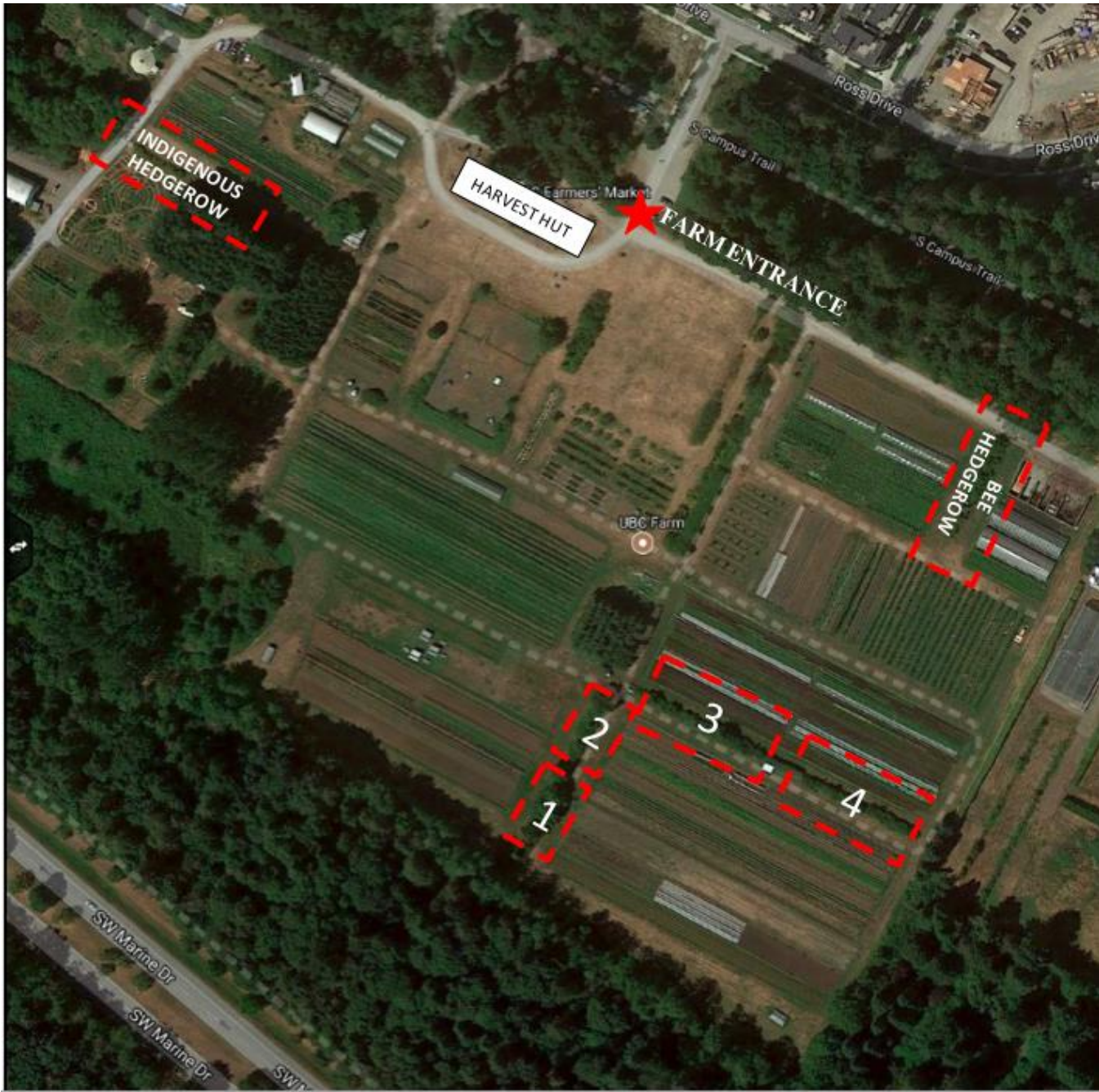
1. *Mahonia nervosa* - dull Oregon grape
2. *Amelanchier alnifolia* - serviceberry / Saskatoon
3. *Vaccinium parvifolium* - red huckleberry
4. *Gaultheria shallon* - Salal
5. *Rosa gymnocarpa* - Baldhip rose
6. *Rubus spectabilis* - salmonberry
7. *Solidago* - Golden Rod
8. *Fragaria vesca* Strawberry
9. *Filipendula ulmaria* - Meadowsweet
10. *Monarda* - Beebalm
11. *Achillea millefolium* Yarrow
12. *Anaphalis margaritacea* - Pearly Everlasting
13. *Valeriana officinalis* - Valerian
14. *Rhodiola rosea* - Roseroot

## Appendix 1



# **HEDGEROW MAPS AT THE UBC FARM**

**Prepared by  
Janela Sanqui and Lal Basok**



## **WHAT IS A HEDGEROW?**

Hedgerows provide multiple benefits and are used in farming systems around the world. Hedgerows can be comprised of many types of trees, shrubs and ground cover and usually favour native species. Some of the functions of hedgerows (and windbreaks/shelterbelts) include: increased biodiversity and habitat for pollinators and other wildlife; microclimate enhancement; reduced erosion; food, timber, biomass, floral, botanical, medicinal production; reduced runoff; increased air and water quality; regulation of water flow between different areas along with creating aesthetic value and connectivity not just on the plot level- but the landscape level as well.

## **BACKGROUND**

*The UBC Farm hedgerow directed study is a constantly evolving and maturing project. It is a project that will perhaps never “end,” or be truly finished. The very nature of hedgerows is successional. And this is the way it should be.*

Morgan A. (2010)

Establishment of the early stages of what now are four hedgerows located in the south east corner of the lower farm field, began back in 2005-2006 when Antonin van der Lely, an undergraduate in UBC Faculty of Land and Food Systems (LFS), completed a directed study titled *Hedgerows, a way to save UBC Farm?*. In 2008, LFS undergraduate Andrea Morgan began a directed study focusing on hedgerow establishment which continued and built upon what Antonin had started.

Andrea's project was completed over a period of 1.5 years and included a great deal of research, consultation with experts, and volunteer contributions. UBC farm staff and student volunteers continue to maintain the hedgerows and add benefit to the site. For instance, the recently erected barn owl box will provide habitat for this species at-risk.

Remapping of the hedgerows was completed in Summer 2018 by two Land and Food Systems Interns (Lal Deniz Basok and Janela Eunice Sanqui) with the supervision of Mel Slyvestre, the Perennial, Biodiversity, and Seed Hub Coordinator at the UBC Farm.

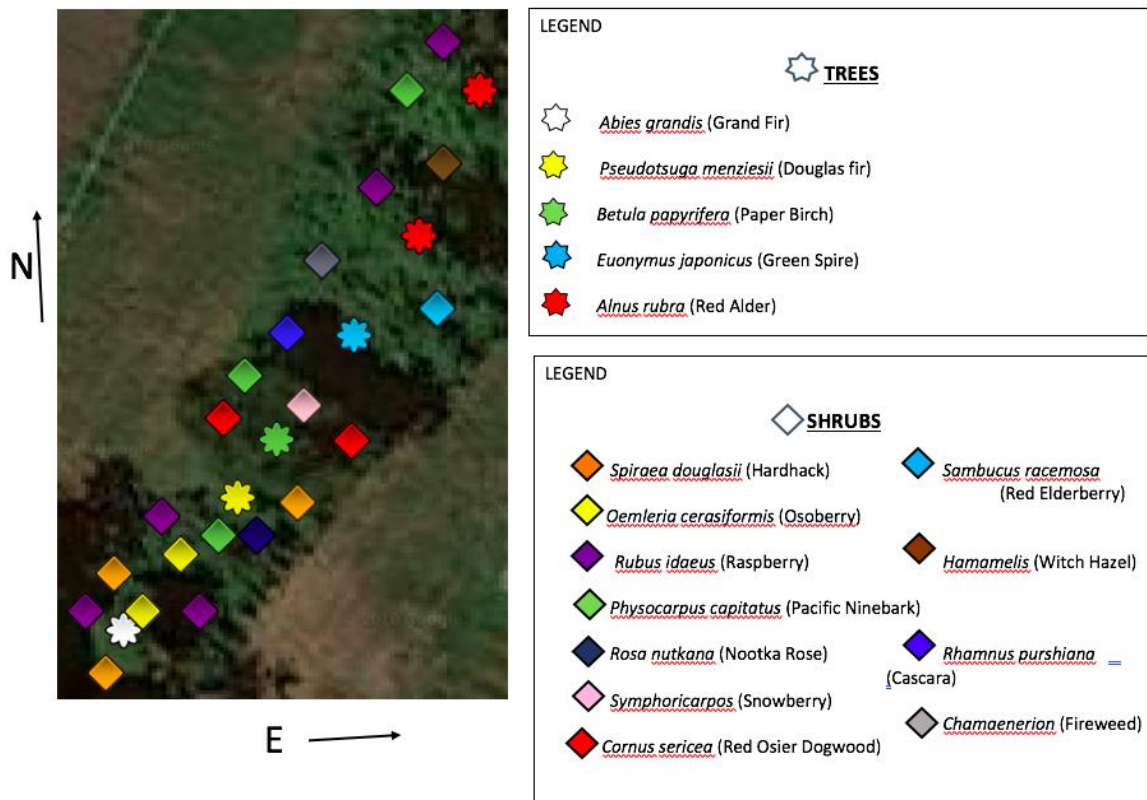
## HEDGEROW 1

In 2005 and 2006, Antonin van der Lely began the establishment of H1 and H2 as a directed study. Antonin only established four species in the H1 strip: one paper birch (*Betula papyrifera*); two red alders (*Alnus rubra*); one unhealthy, stunted noble fir (*Abies procera*); and continual clusters of unidentified non-native raspberries. This strip is closest to the forest edge and is also the lowest lying of all four strips. It is by far the wettest and most shaded area, creating a “cold pocket” where frost can remain for hours after the sun has risen. Of the four strips, the O and A soil horizons in H1 are the deepest, richest in humus, and least rocky. The strip is situated in a north-south orientation and is a considerable distance (approximately 15 feet) away from both adjacent cultivated field edges.

The comparatively humus-rich soil and moisture levels allowed Andrea to plant willow and hardhack, which are both excellent regenerative wildlife habitat species that demand constant moisture and substantial organic matter to do well. Andrea also planted a linden and vine maple, both of which are great bee forage, knowing that neither would reach full height before needing to be cut down (or topped) once they begin to shade out fields. However, the heights at which these trees will remain for a decade or more will not be so high that they cause problems, but rather, will serve as windbreaks, bird travel corridors, bee forage and a number of other beneficial functions.

H1 can be summarized as focusing heavily on wildlife and ecological capacity building with special attention paid to bee forage, bird travel corridors and soil quality building (mainly through nitrogen fixing alders). There are only a few species in H1 that produce readily edible crops for humans (raspberry) and the focus on medicinal and other non-timber products is minimal.

## HEDGEROW 1
















## HEDGEROW 2

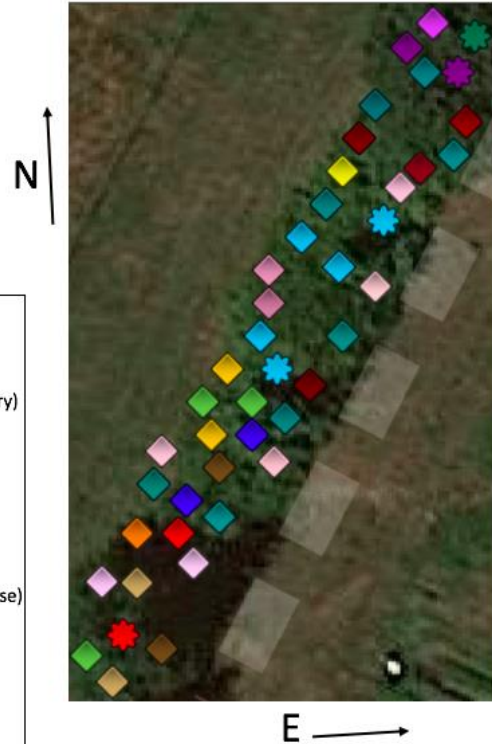
Along with creating the aforementioned windbreak, Andrea focused H2 heavily on trees and shrubs with medicinal, culinary and First Nations cultural significance (i.e. crafting materials, medicines, tools, etc.). Species such as cascara, red-flowering currant, tall Oregon grape, mock orange and ocean spray exemplify this focus and can be found interspersed throughout H2. Thus, additional plantings of snowberry, elderberry and paper birch are woven throughout the formerly and newly planted areas of H2. All of the species mentioned thus far are indigenous to the Vancouver area and therefore also service important native insects, birds, small mammals and other biota crucial to creating maintaining an effective and healthy hedgerow. The beautiful, semi-evergreen *Viburnum* was bred and released by the UBC Botanical Gardens and can be used as cut flowers for market sales while providing excellent aesthetic appeal.



## HEDGEROW 2

TREES	
	<i>Alnus rubra</i> (Red Alder)
	<i>Acer macrophyllum</i> (Big Leaf Maple)
	<i>Sorbus sitchensis</i> (Sitka Mountain Ash)
	<i>Salix scouleriana</i> (Scouler's Willow)

SHRUBS			
	<i>Holodiscus discolor</i> (Ocean Spray)		<i>Rubus parviflorus</i> (Thimbleberry)
	<i>Physocarpus capitatus</i> (Pacific Ninebark)		<i>Mahonia aquifolium</i> (Tall Oregon Grape)
	<i>Ribes sanguineum</i> (Red Flowering Currant)		<i>Sambucus racemosa</i> (Red Elderberry)
	<i>Symphoricarpos</i> (Snowberry)		<i>Rosa gymnocarpa</i> (Baldhip Rose)
	<i>Rubus spectabilis</i> (Salmonberry)		<i>Lupinus polyphyllus</i> (Large-leaved Lupin)
	<i>Rhamnus purshiana</i> (Cascara)		<i>Rubus idaeus</i> (Raspberry)
	<i>Leucosium aestivum</i> (Summer Snowflake)		



## HEDGEROW 3

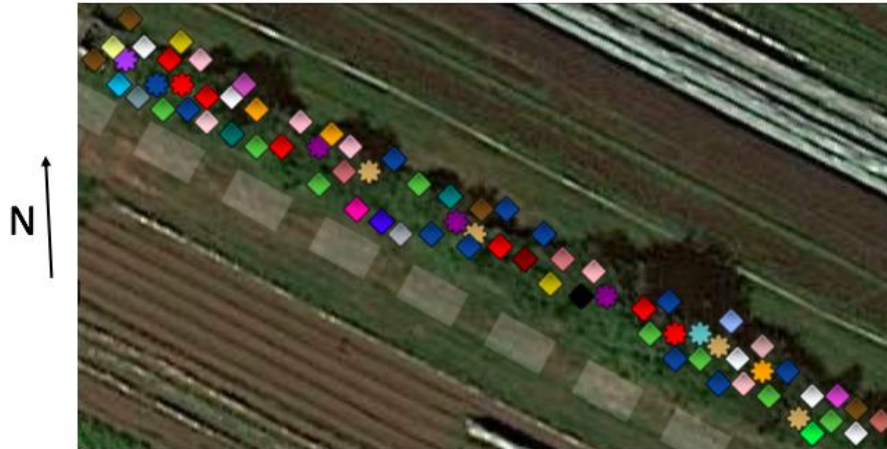
H3 is a mix of both native and non-native species, with the most emphasis on food and ornamental crops of the four strips. It is also by far the most unconventional and experimental strip. H3 and H4 are the only hedgerows containing fig trees. The site conditions in H3 (and H4) are not exactly optimal for establishing a high density strip of perennials. The width of the strip is by far too narrow (12-15 feet is optimal) and there is no room for an “emergent zone” of perennial grasses and a water ditch. In the case of the UBC Farm however, lacking these features is not necessarily a detriment: perennial grasses may encourage wireworm/click beetle populations and unlike the low-lying, shallow water table lands of the Fraser Valley, the UBC peninsula is relatively elevated and the sandy soils are well drained, negating the need for water ditch drainage.

The soil in H3 is quite variable throughout the strip, although several years of sheet mulching has added a significant amount of organic matter to the A horizon. This site is also quite exposed to strong winds and full sun for up to 10 hours during the middle summer months. It is important to note that because both H3 and H4 are oriented in an east – west direction and are roughly 10 feet south of a production field, the maximum height these hedgerows can grow is quite limited.

The species schema for H3 is the most diverse of all strips. In general, the mix between native and non-native plants is fairly diffuse. Similarly, there is a decent amount of evergreen and deciduous shrubs and species continuity, despite the wide variety. Most of the food producing plants (notably berries) are on the southern edge of the strip and have been given ample room to grow, where they will receive full sunlight and enough air circulation to produce abundant yields. There are also several food producing native species in H3 that continue through H4 and should be monitored and used for similar purposes as the non-native food producers. These include: tall and creeping Oregon grape, service/Saskatoon berry, hazelnut and crabapple. Such species are planted much more sparsely in H3 than in H4 and are intended to give some continuity between the strips. More importantly however, they have been planted experimentally to see how well untraditional combinations of plants will survive and meet the overall objectives for the hedgerows.

### HEDGEROW 3

★ TREES	◇ SHRUBS	◆ UNKNOWN SPECIES
★ <i>Ficus carica</i> (Fig)	◇ <i>Symphytum spp.</i> (Comfrey)	◆ <i>Spiraea douglasii</i> (Hardhack)
★ <i>Populus spp.</i> (Poplar Tree)	◆ <i>Ribes sanguineum</i> (Red Flowering Currant)	◆ <i>Lonicera involucrata</i> (Black Twinberry)
★ <i>Alnus rubra</i> (Red Alder)	◇ <i>Lonicera caerulea</i> (Haskap)	◆ <i>Ribes x nidigroralia</i> (Jostaberry)
★ <i>Sorbus sitchensis</i> (Sitka Mountain Ash)	◆ <i>Physocarpus capitatus</i> (Pacific Ninebark)	◆ <i>Rubus paviflorus</i> (Thimbleberry)
★ <i>Corylus cornuta</i> (Beaked Hazelnut)	◇ <i>Amelanchier alnifolia</i> (Saskatoon Berry)	◆ <i>Cornus sericea</i> (Red Osier Dogwood)
	◆ <i>Rosa nutkana</i> (Nootka Rose)	◆ <i>Mahonia nervosa</i> (Dull Oregon Grape)
	◆ <i>Berberis thunbergii</i> (Barberry 'Cherry Bomb')	
	◆ <i>Philadelphus</i> (Mock Orange)	
	◆ <i>Symphoricarpos</i> (Snowberry)	
	◆ <i>Rubus spectabilis</i> (Salmonberry)	
	◆ <i>Paeonia</i> (Peonies)*	
	◆ <i>Mahonia aquifolium</i> (Tall Oregon Grape)	
	◆ <i>Gaultheria shallon</i> (Salal)	


























## **HEDGEROW 4**

The H4 hedgerow is the most regionally significant and mimics the species makeup of a typical hedgerow in British Columbia's lower-mainland. Mostly adopted from Delta Farmland and Wildlife Trust documents, interviews and field trips, this hedgerow is meant to mirror the hedgerows one sees driving past Fraser Valley farmland. 95% of the species found in H4 are native and recommended specifically for hedgerow establishment by Delta Farmland & Wildlife Trust's responsible land stewardship initiative. Some of the more prominent species include, but are not limited to: beaked hazelnut, black hawthorn, Pacific crabapple, serviceberry, thimbleberry, mock orange and red-osier dogwood. This is the only strip that was fully examined and consulted with Markus Merkins, who is widely regarded as a hedgerow expert in the region. The few species that have been mixed in and are non-native ('Center Glow' ninebark cultivar and fig) were planted mostly to fill up space after some nursery ordering trouble. H4 is a useful educational subject both for demonstrational purposes, and as a comparative tool for analyzing how well one form of hedgerows interacts with varying land bases.

Unfortunately, this strip has by far the worst soil conditions of all four hedgerows, which could significantly affect its growth compared to other sites. The site's B Horizon is considerably close to the surface and there is almost no organic matter.

## HEDGEROW 4

TREES	SHRUBS		
 <i>Corylus cornuta</i> (Beaked Hazelnut)	 <i>Ribes sanguineum</i> (Red Flowering Currant)	 <i>Gaultheria shallon</i> (Salal)	 <i>Mahonia nervosa</i> (Dull Oregon Grape)
 <i>Malus fusca</i> (Pacific Crabapple)	 <i>Cornus sericea</i> (Red Osier Dogwood)	 <i>Physocarpus capitatus</i> (Pacific Ninebark)	 <i>Rubus spectabilis</i> (Salmon Berry)
 <i>Ficus carica</i> (Fig)	 <i>Symphoricarpos</i> (Snowberry)	 <i>Rubus parviflorus</i> (Thimbleberry)	 <i>Philadelphus</i> (Mock Orange)
 <i>Populus spp.</i> (Poplar Tree)	 <i>Lonicera involucrata</i> (Black Twinberry)	 <i>Mahonia aquifolium</i> (Tall Oregon Grape)	 <i>Vaccinium ovatum</i> (Evergreen Huckleberry)
	 <i>Holodiscus discolor</i> (Oceanspray)	 <i>Rosa notkana</i> (Nootka Rose)	 <i>Amelanchier alnifolia</i> (Saskatoon Berry)
		 <i>Crataegus douglasii</i> (Black Hawthorn)	 <i>Rosa gymnocarpa</i> (Baldhip Rose)

N ↑








## BEE HEDGEROW

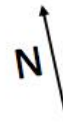
The Bee Hedgerow at UBC Farm contains many of the same native plant species as the other hedgerows but also includes herbaceous species for bee forage. The Bee Hedgerow is also wider than the other hedgerows with more spacing between trees and shrubs. This hedgerow is located in the North-east corner of the farm next to the hoop houses and Maya garden.

**BEE HEDGEROW**

 <b>TREES</b>	 UNKNOWN SPECIES
 <i>Malus fusca</i> (Pacific Crabapple)	
 <i>Betula papyrifera</i> (Paper Birch)	
 <i>Salix sitchensis</i> (Sitka Willow)	

 **SHRUBS**

 <i>Physocarpus capitatus</i> (Pacific Ninebark)	 <i>Lupinus polyphyllus</i> (Large-leaved Lupin)
 <i>Sambucus racemosa</i> (Red Elderberry)	
 <i>Cornus sericea</i> (Red-Osier Dogwood)	
 <i>Ribes sanguineum</i> (Red Flowering Currant)	
 <i>Lonicera involucrata</i> (Black Twinberry)	
 <i>Mahonia aquifolium</i> (Tall Oregon Grape)	
 <i>Symphoricarpos</i> (Snowberry)	
 <i>Rubus spectabilis</i> (Salmonberry)	
 <i>Rosa notkana</i> (Nootka Rose)	



## INDIGENOUS HEDGEROW

The Indigenous hedgerow is located adjacent to the xʷčičəsəm garden. It was established in 2014 with a grant received by Ecoaction (a community funding program provided by the Government of Canada). The plants included in the Indigenous hedgerow were chosen in consultation with members of community including the Indigenous medicine collective, Nature's Vancouver bird watchers, and xʷčičəsəm garden members. The primary goal was to increase the amount of medicinal plants available to the community while increasing biodiversity at UBC Farm. The hedgerow is used by the members of the indigenous community of the UBC Farm mainly for teaching purpose.

### INDIGENOUS HEDGEROW

◇ SHRUBS	◇ HERBS	
◆ <i>Mahonia nervosa</i> (Dull Oregon Grape)	◆ <i>Solidago</i> (Golden Rod)	◆ <i>Valeriana officinalis</i> (Valerian)
◇ <i>Amelanchier alnifolia</i> (Saskatoon Berry)	◆ <i>Fragaria vesca</i> (Native Strawberry)	◆ <i>Rhodiola rosea</i> (Rose Root)
◆ <i>Vaccinium parvifolium</i> (Red Huckleberry)	◆ <i>Filipendula ulmaria</i> (Meadowsweet)	
◆ <i>Gaultheria shallon</i> (Salal)	◆ <i>Monarda</i> (Beebalm)	
◆ <i>Rosa gymnocarpa</i> (Baldhip Rose)	◆ <i>Achillea millefolium</i> (Yarrow)	
◆ <i>Rubus spectabilis</i> (Salmonberry)	◆ <i>Anaphalis margaritacea</i> (Pearly Everlasting)	



## PLANT SPECIES GALLERY

### TREES



***Abies grandis* - Grand fir**



***Acer macrophyllum* - Bigleaf maple**



***Alnus rubra* - Red alder**



***Betula  
papyrifera* -  
Paper birch**





***Salix sitchensis* - Sitka willow**



***Tilia cordata* - Linden 'greenspire'**



***Sorbus sitchensis* - Sitka mountain - ash**



***Salix scouleriana* - Scouler's willow**



***Corylus cornata var. californica* - Beaked hazelnut**



***Ficus spp.* - Fig 'Brown turkey'**



***Malus fusca*-  
Pacific  
Crabapple**



***Populus spp.* - Poplar tree**



## SHRUBS



***Physocarpus capitatus* - Pacific ninebark**



***Physocarpus opulifolius* - Pacific ninebark 'Centre glow'**



***Rubus* spp. - Raspberry**



***Spirea douglasii* - Hardhack**



***Holodiscus discolor* - Oceanspray**





***Gaultheria shallon* - Salal**



***Rubus parviflorus* - Thimbleberry**



***Rhamnus purshiana* - Cascara**



***Lupinus polyphyllus* - Large-leaved lupin**



***Rubus spectabilis* - Salmonberry**



***Ribes* spp. - Gooseberry**



***Ribes sanguineum* - Red flowering currant**



***Sambucus racemosa* spp. - Red elderberry**



***Symphocarpus albus* - Snowberry**



***Viburnum plicatum* - Viburnum 'summer snowflake'**



***Vaccinium parvifolium* - Red Huckleberry**



***Amelanchier alnifolia* -  
Saskatoon berry / Serviceberry**



***Berberis thunbergii* - barberry 'Cherry bomb'**



***Mahonium aquifolium* - Tall Oregon Grape**





***Mahonium nervosa* - Dull Oregon Grape**



***Philadelphus lewisii* - Mock orange**



***Ribes nidigrolaria* - Jostaberry**



***Ribes nigrum* - Black currant 'Crandall'**



***Rosa nutkana* - Nootka rose**



***Spiraea* spp. - Ornamental spiraea**



***Craetagus douglasii* - Black Hawthorn**



***Lonicera involucrata* - Black twinberry**



***Monarda* - Beebalm**



***Filipendula ulmaria* - Meadowsweet**



***Solidago spp.* - Golden rod**



***Anaphalis margaritacea* - Pearly everlasting**



***Achillea millefolium* - Yarrow**



***Rosa gymnocarpa* - Baldhip rose**



***Paeonia* - Peonies \***





***Symphytum spp.* - Comfrey**



***Leucojum aestivum* - Summer snowflake**



***Hamamelis spp.* - Witch Hazel**



***Valeriana officinalis* - Valerian**



***Rhodiola rosea* - Rose root**



***Fragaria vesca* - Native strawberry**



***Chamaenerion* - Fireweed**



***Lonicera caerulea* - Haskap**



***Oemleria cerasiformis* - Osoberry**



***Cornus colonifera* - Red-osier  
dogwood**



## Bibliography

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