

Design Pathways

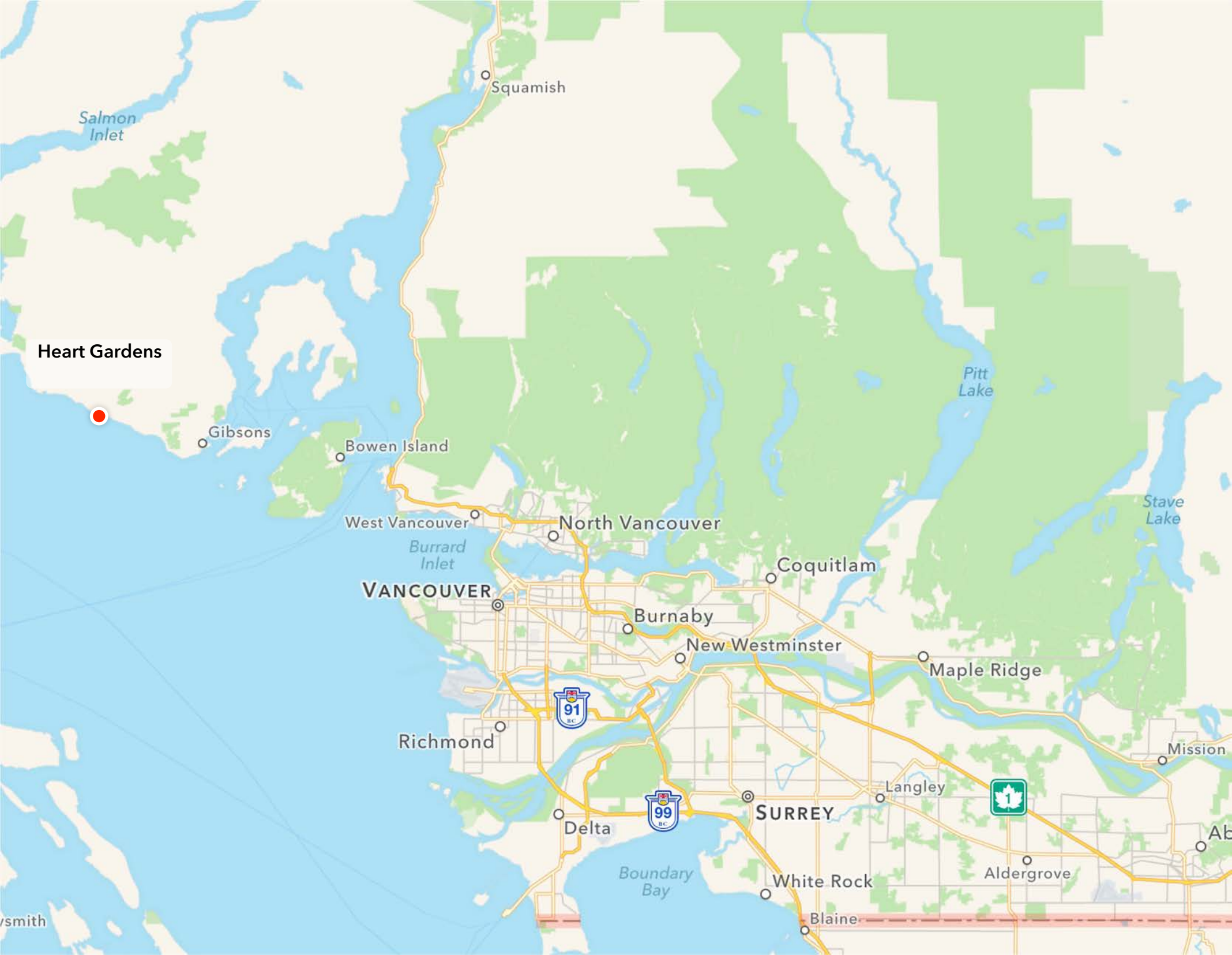
Gardening





Permaculture
Diploma Design
Heart Gardens





Heart Gardens



Heart Gardens

Climate

Population : 3244 people

Area 143.6 sq. km.

Days of rain 167

Yearly rain average 1369 mm

Days of snow on mountain 25

Yearly snow average on mountain 236 cm

Average temperature and precipitation :

January temp 0.2 - 2.9, rain 266 mm,
snow 72 cm

February temp 2.3 - 6, rain 235 mm,
snow 48 cm

March temp 5.7 - 10.6, rain 189 mm,
snow 22 cm

April temp 9 - 14.6, rain 159 mm, snow 3 cm

May temp 12.5 - 18.3, rain 106

June temp 15.2 - 20.9, rain mm 86 mm

July temp 17.7 - 24, rain mm 61 mm

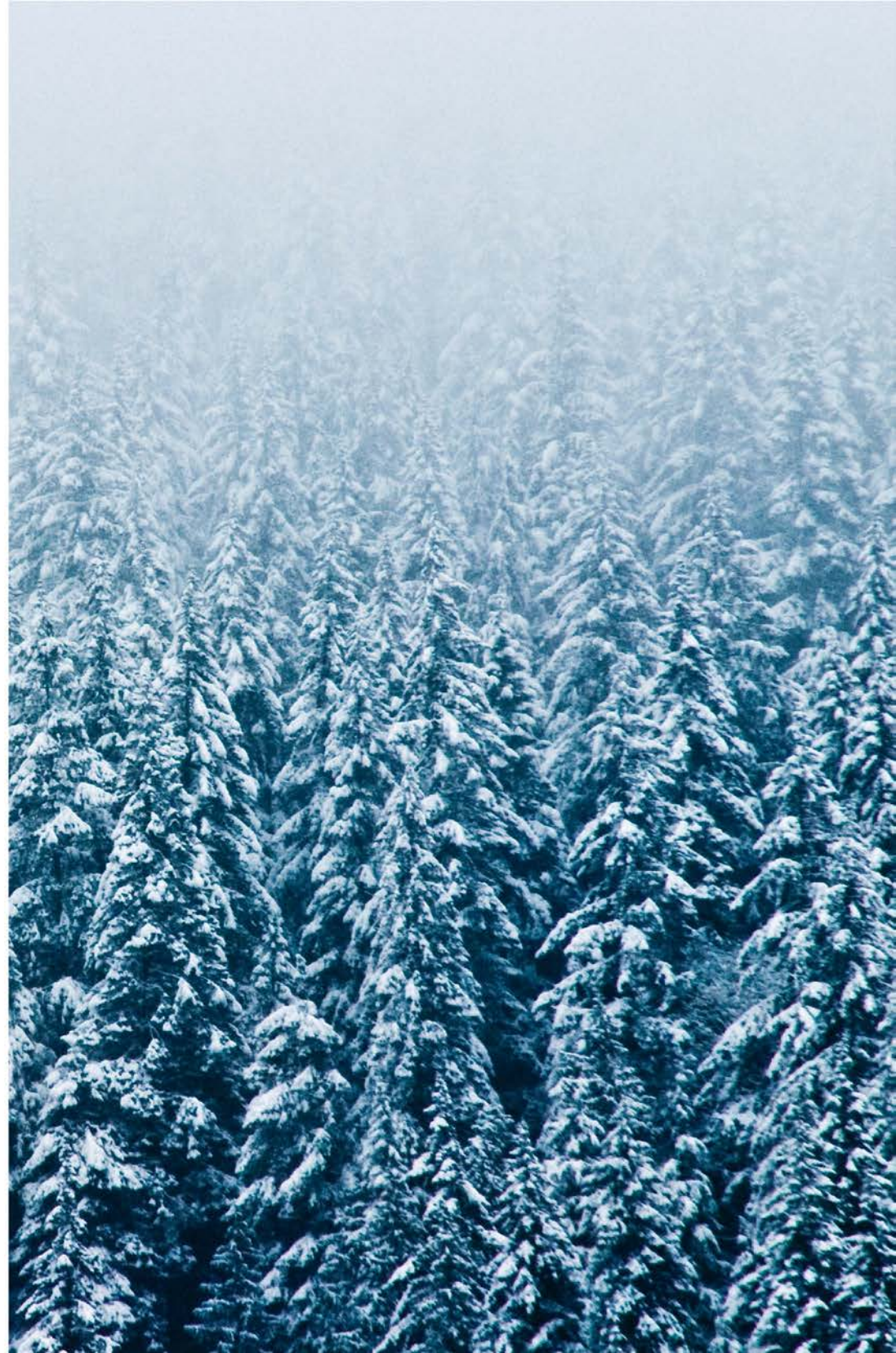
August temp 17.8 - 24.5, rain 60 mm

September temp 14.6 - 21, rain 88 mm

October temp 9.1 - 13.8, rain 279 mm,
snow 1 cm

November temp 3.5 - 6.2, rain 358 mm,
snow 21 cm

December temp -0.1 - 2.2, rain 245 mm,
snow 69 cm





Journey from Vancouver across to the Sunshine Coast. Stunning Photo © Kent Kallberg www.kentkallberg.com





Nestled on the pacific ocean protected by the vast Vancouver Island, a temperate coastal rainforest



At the base of Mt. Elphinstone on the traditional gathering grounds of the Sechelt / Shishá7lh and Squamish / Skwxwu7mesh Nation.







SECOND NATURE DESIGNS

1281 Denman Street
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REVISIONS:

Nov. 7, 2007	revised
Nov. 29	revised
Feb. 15, 2008	revised
Mar. 4	revised
Mar. 22	revised
Apr. 18	revised
May 26	revised
Sept. 2	revised for post office loading
Sept. 12	grades, door access, loading area

PROJECT:

HEART OF THE CREEK

TITLE:

LANDSCAPING PLAN & SITE DATA

DATE: SEPTEMBER 12TH, 2007

SCALE: 1/16" = 1'-0"

DRAWN: S. CHRISTIAN

CHECKED:

PROJECT No.:

SHEET No.:

A0

Pretro

This is the fourth of ten designs being done for my Permaculture Diploma through the Permaculture Association UK under the wise mentorship of Looby Macnamara. Using social permaculture strategies including the Design Web, this is an exploration of creative permaculture design methodologies.

These designs and program stack into a 7 year non-accredited Doctoral Degree under the guidance of the great Larry Santoyo.

I hope this inspires others to make maps and designs of their homes, gardens, landscapes and community and pursue post-PDC permaculture.





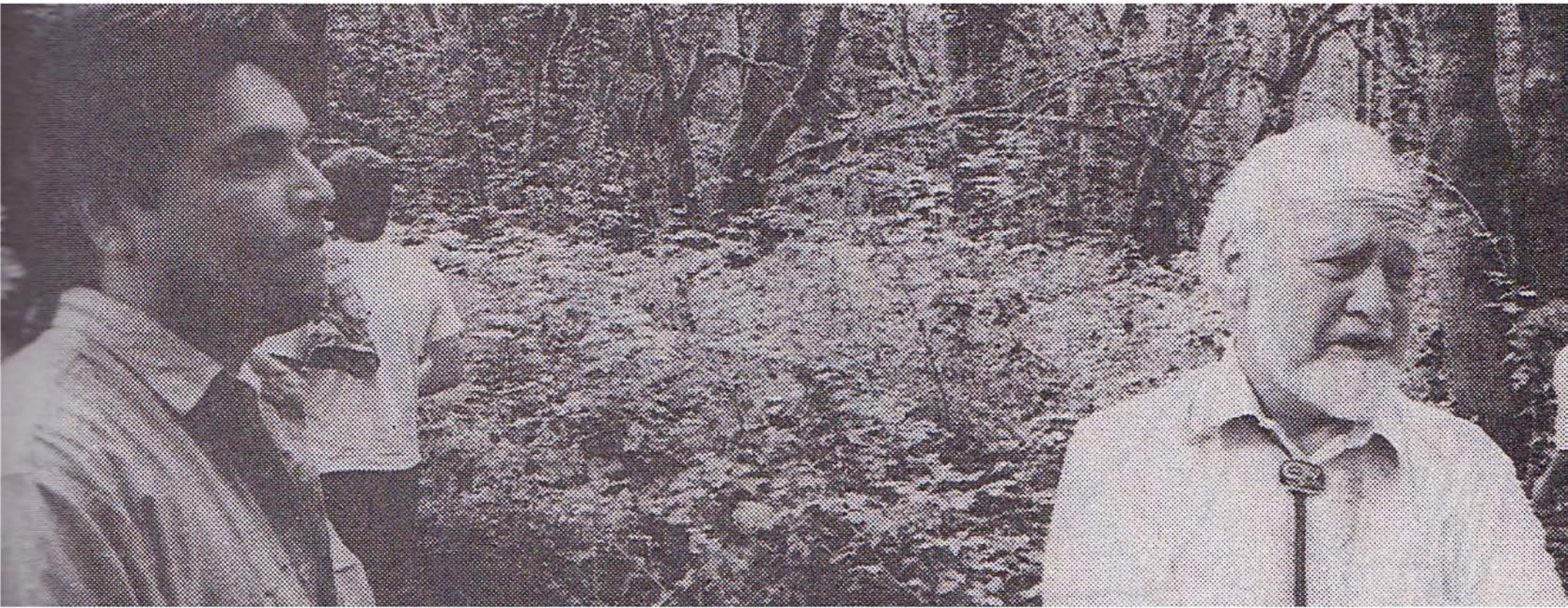
Intro

The Heart Gardens is located in the Heart of the Creek, the downtown of the tiny village of Roberts Creek. In 2004, after building community gardens all over the Sunshine Coast and learning gardens on the playgrounds of most local elementary schools, I was blessed to meet Mark, Lorinda, Don and Jean Van Kleeck, a truly beautiful family. They were dedicated to building the Heart of the Creek as a functional and beautiful downtown for our village. I told them that developing and caring for the Heart Gardens was my dream job, and every year this has become more true.

The gardens are designed for heavy wear and tear including kids and dogs, summer drought, winter snow and freezes. The plant community features 372 species of hearty cool climate perennials. At the heart of the collection are 187 species of plants with a long history of use by the Coastal First Peoples.

Dedication

When I got the job designing, developing and stewarding the gardens in 2004 I has just finished my Diploma with Bill Mollison and the Permaculture Academy and began my Masters Degree with Bill Mollison and Patricia Michael with the first dip of the shovel into the Earth. Bill supported the garden development until 2010 after my Masters was completed, when he connected me with the extraordinary Larry Santoyo. Under Larry's guidance over the course of a two year Diploma and now a 7 year Doctoral study, the Heart Gardens has been a feature of my work. I am paid by the owners of the property as my right livelihood. I feel blessed live in, care for and develop this learning garden for the locals and visitors.



For many years I studied under, and then taught with, master herbalist and homesteading maestra Robin Wheeler. Her permaculture nursery of unusual cold hearty, drought tolerant, high production plants with many uses became the foundation for the original plant community in the garden. Robin passed while I was still part way on my journey.

My dear brother Vacio Cielo is another Heart Gardens Steward, helping care for the grounds and tagging in on the gardens when I am away doing outreach.



A close-up photograph of a green plant stem. The stem is thick and has several nodes. At one node, a small, dark, oval-shaped seed is attached. The stem is surrounded by large, green, serrated leaves. The background is blurred green foliage.

Seed



Essence

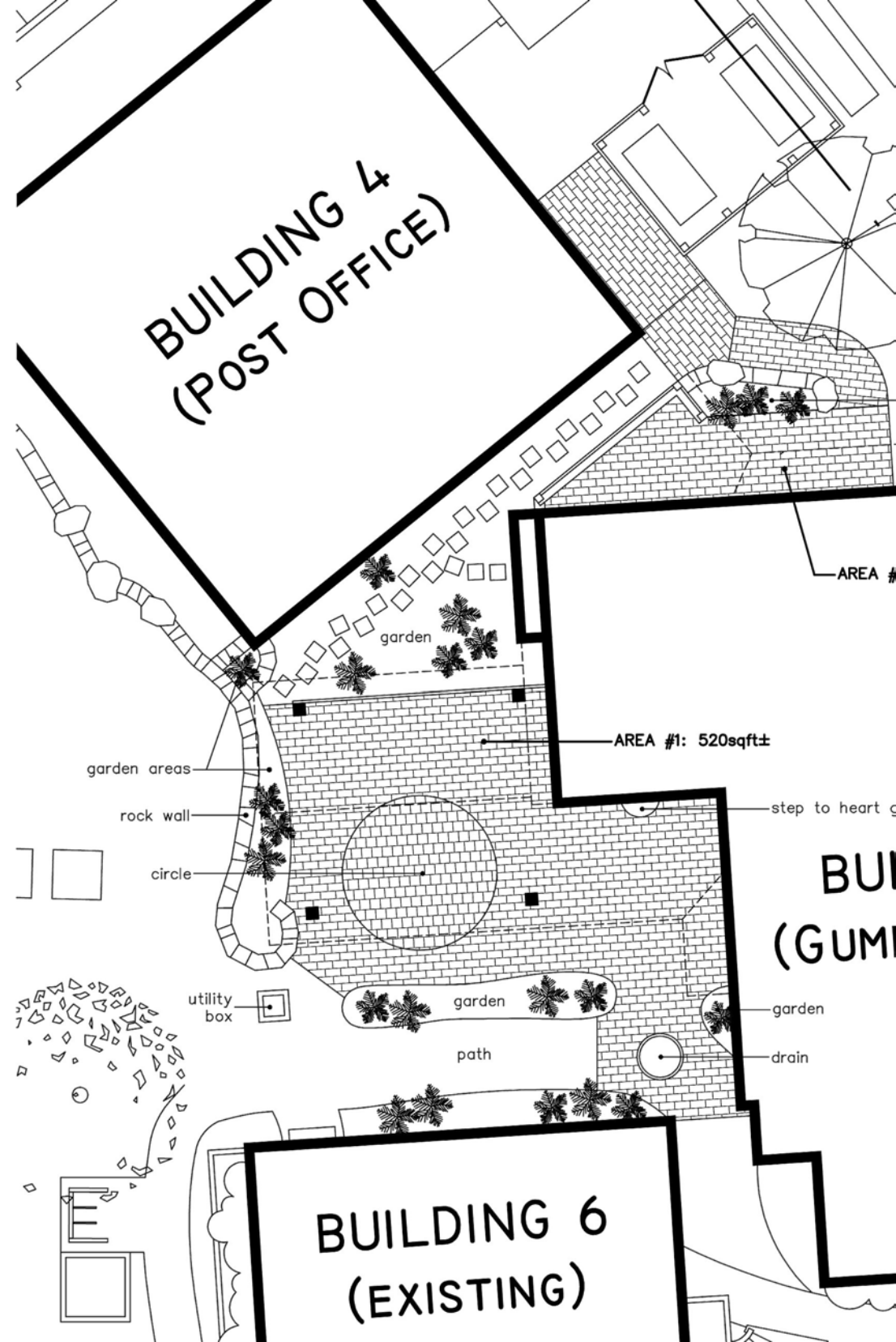
Looby Macnamara suggests this be :
a summary of the map and design including the plan for what you want to happen, how and where elements will go, when things will happen and how the different elements relate to each other.

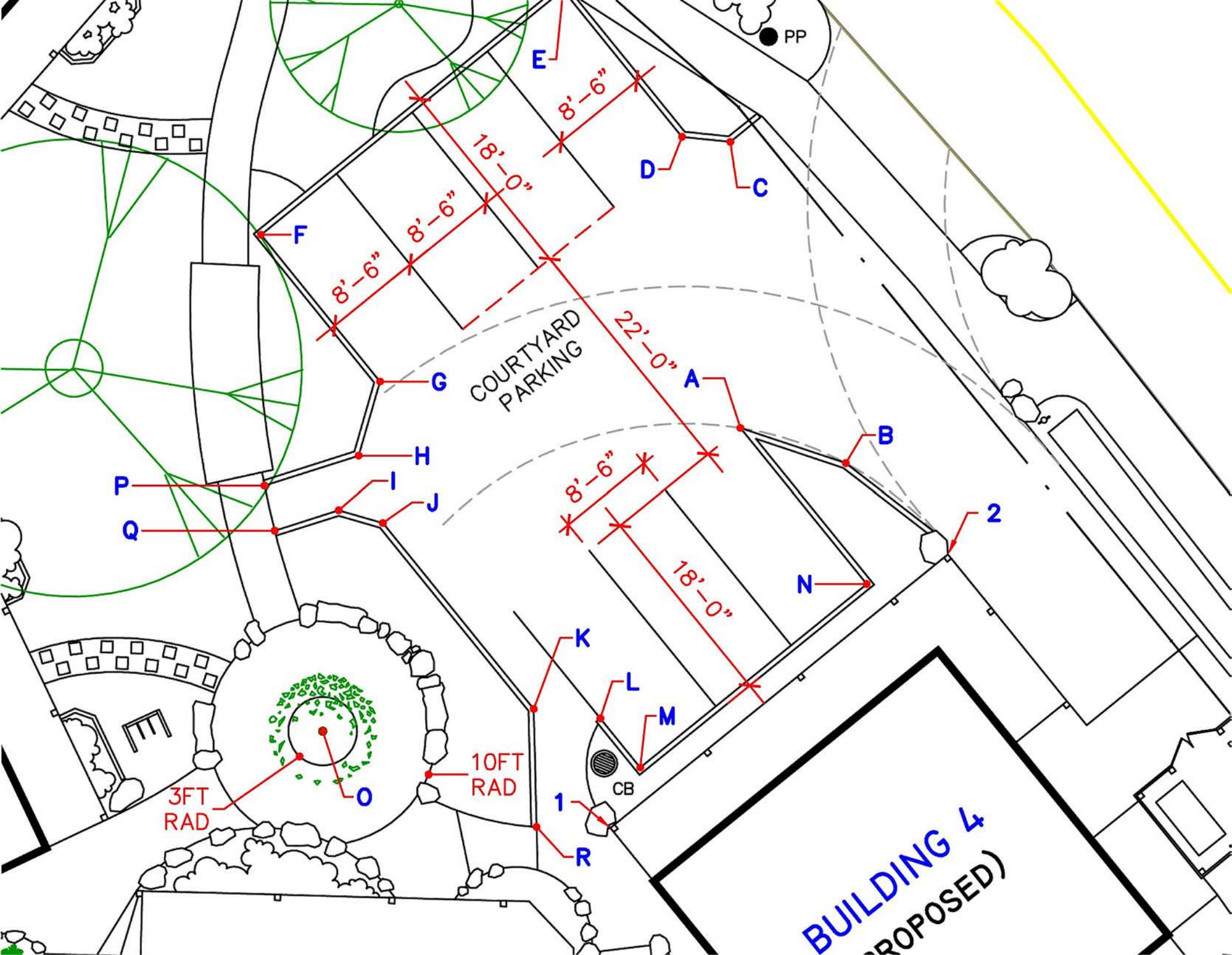
This design and application is very much in process. The idea is to create a guided set of permaculture education gardens addressing food security and polycultural, food forestry at the smallest garden scale. With food, medicine, and tools for people and animals in each month of the year, the garden is planned in a dynamic succession. A special eye to placemaking elements for people and animals includes benches, bird, bat and bee houses. The gardens are part of a social permaculture strategy to deepen relationships with local government, educational groups and non-profit organizations. Elements are being considered to help fulfill each others functions and gardens are guided with nitrogen fixers, biodynamic herbs, bioaccumulators, spike root plants, pollinators, insectaries, sentinels, nurses bankers, and weeds.

Design Site

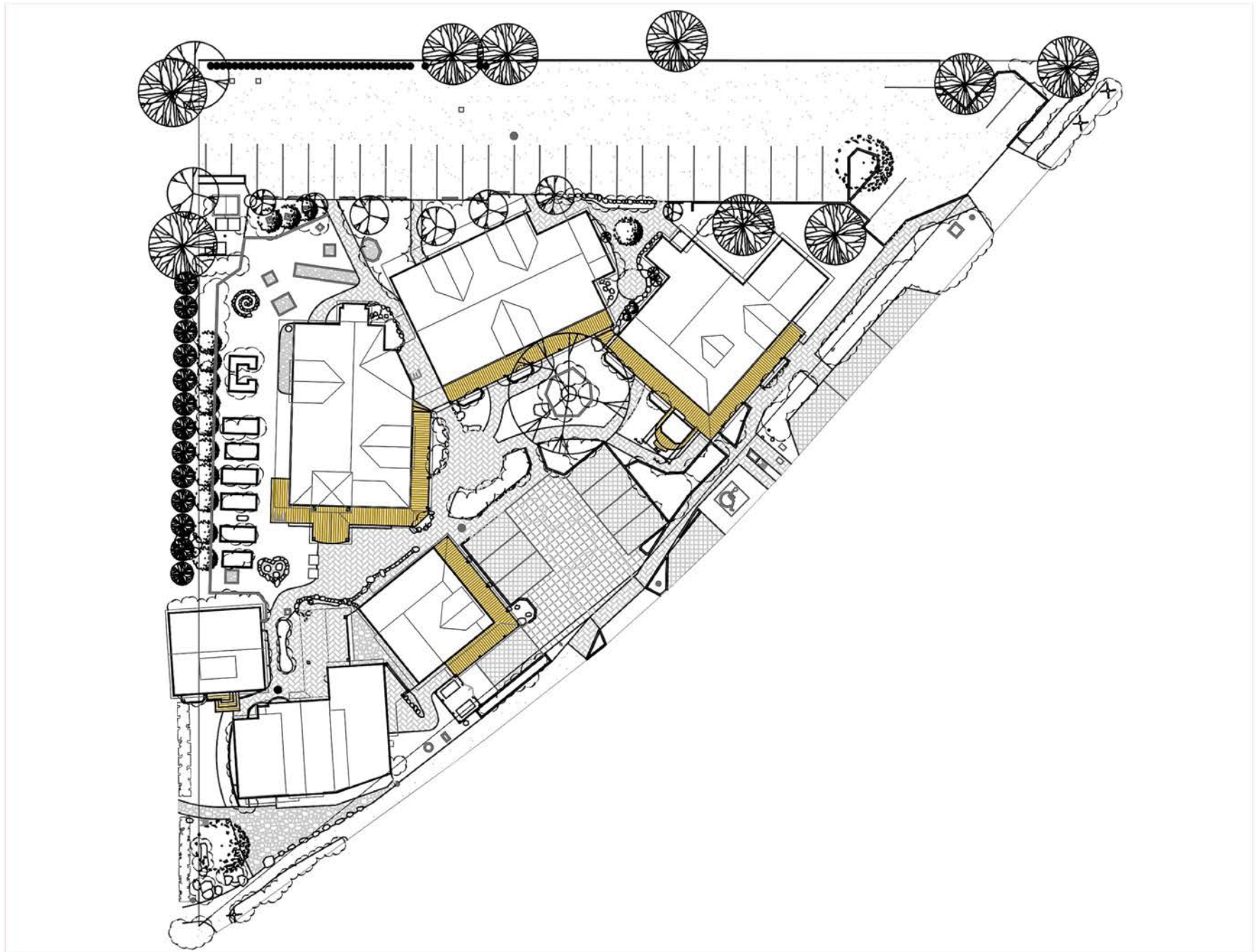
Observed info, elements, plants, animals, zones and sectors

The Heart of the Creek property includes two heritage buildings with a Cafe and Music School as well as a uniquely magical crystal and gem shop. When I arrived in 2004 there was two new large building put in with a variety of local shops and stores including a Health Food Store, Hair Salon, Massage Studio, Midwives, and Outdoor Adventure store. A new building was put in early in my gardening work to host a world class Woodworking School as well as a mulitroom Yoga Studio and Healing Center. At a time when most post-offices were closing and merging with corporate fast food grocers, I helped the landowners to carry our initiative to get a new post office through all levels of local and regional government.









Steve Christian's creative work has led the main site design and is creator of these maps, he is Second Nature Designs.





Working with Esco Goodwin, Mac Avery and Don Van Kleeck, we built gardens, pathways and creative seating.

Come celebrate the bounty of the Coast at the weekly

Roberts Creek Heart Market

Sundays, 11 till 2
May to October
Heart of the Creek

Local, Organic Farm produce
Artisan wares and crafts
Live entertainment

Vendors : contact Ian at the Roberts Creek
Health Food Store for more details

A co-operative venture between the Roberts Creek
Health Food Store, The Heart Gardens, and
Heart of the Creek Holdings.



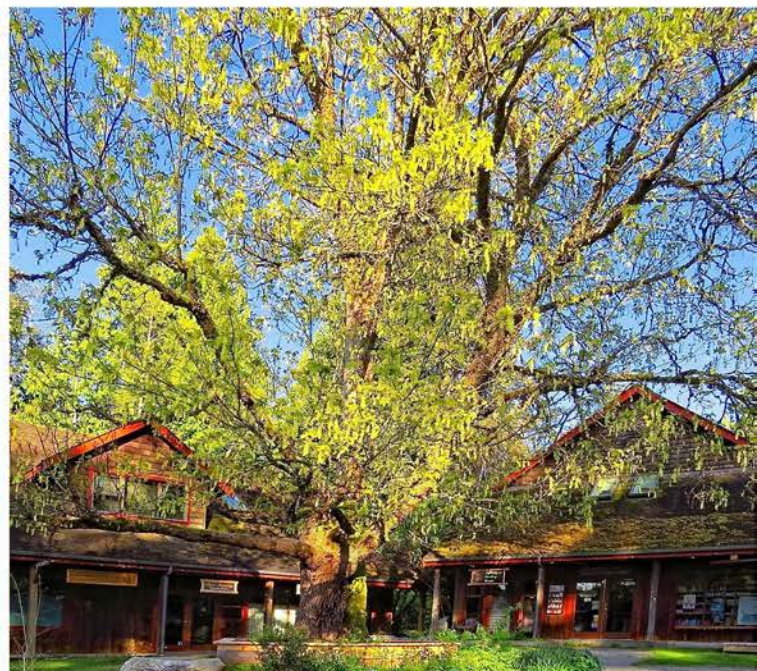


The site has many features including roof catchment, community gardens, benches and alot of food, seeds and cuttings.





In the heart of winter, local visionary artist Tyler Gentry does an epic level ice and light sculpture in the center of the property.



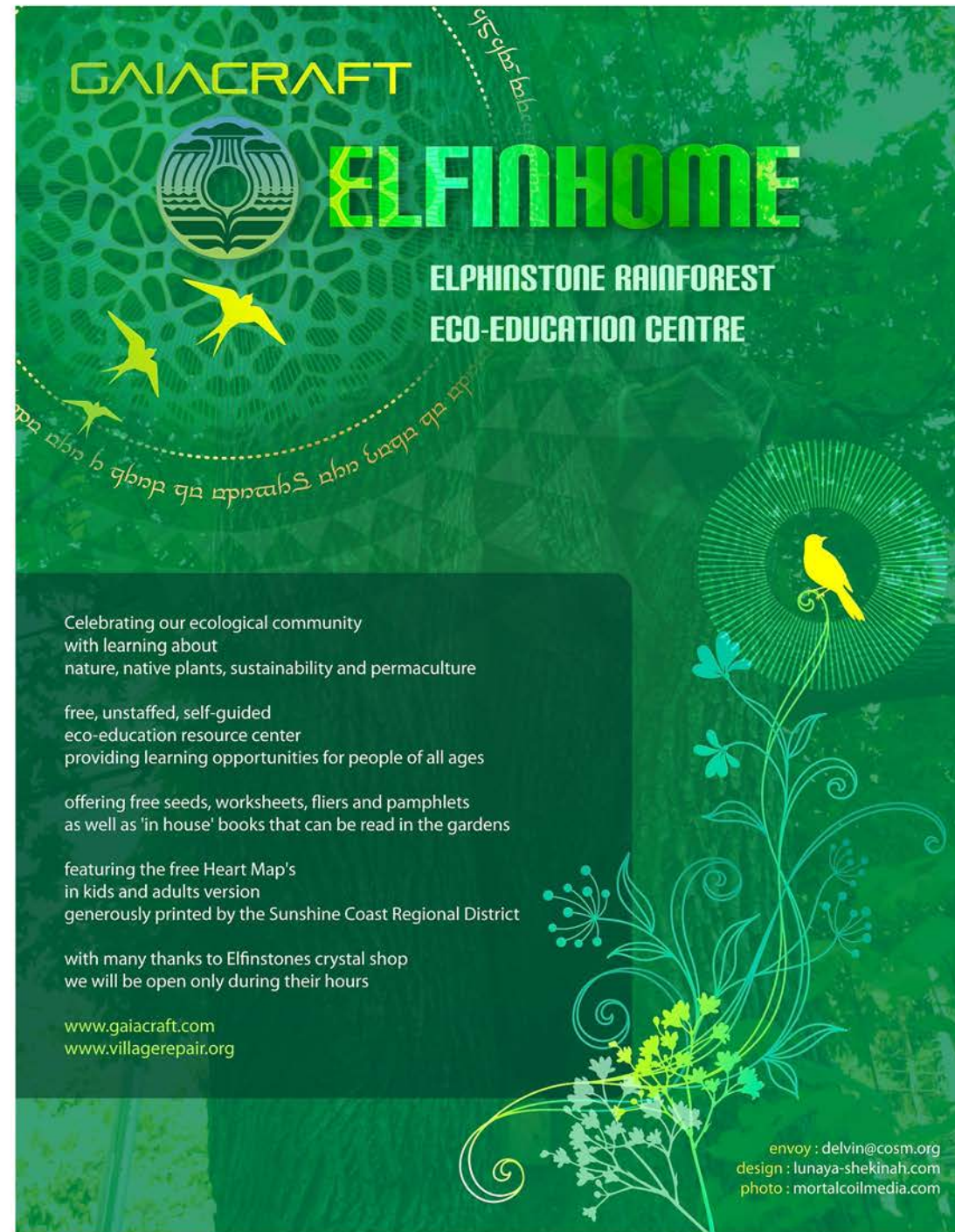


Ambrosia
Organic Living

Law Office

Eco-Education

Thanks to Jefe Willital and the Elfinstones onsite, as well as the visionary Jedi Ian Hunt I was able to move from the tiny eco-education center I had for the first 8 years of the gardens into a small but beautiful building on a new cedar platform under the tree in the heart of the property. Its way more visible now and used alot more. This is cared for by some of the Gaiacraft team including Dana Wilson, Kym Chi, Ian Hunt and Vacio Cielo. Officially speaking this is a 'auxiliary book storage building', its unstaffed and open to the public. The space shares many free resources, books, learning tools, maps and texts. Free maps of the gardens are provided as printed by the Regional District government. This also shares access to the complete 400 pages of permaculture maps and designs including the exact location and function of every plant in the gardens and extensive sector info. Here there is a seed library with free seeds for the community.



GAIA CRAFT

ELFINHOME

**ELPHINSTONE RAINFOREST
ECO-EDUCATION CENTRE**

Celebrating our ecological community
with learning about
nature, native plants, sustainability and permaculture

free, unstaffed, self-guided
eco-education resource center
providing learning opportunities for people of all ages

offering free seeds, worksheets, fliers and pamphlets
as well as 'in house' books that can be read in the gardens

featuring the free Heart Map's
in kids and adults version
generously printed by the Sunshine Coast Regional District

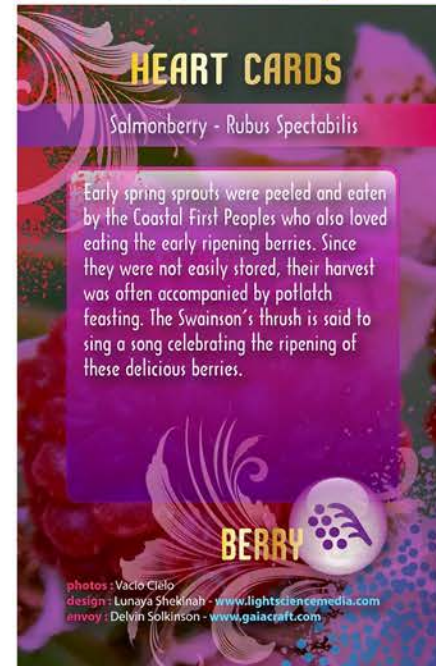
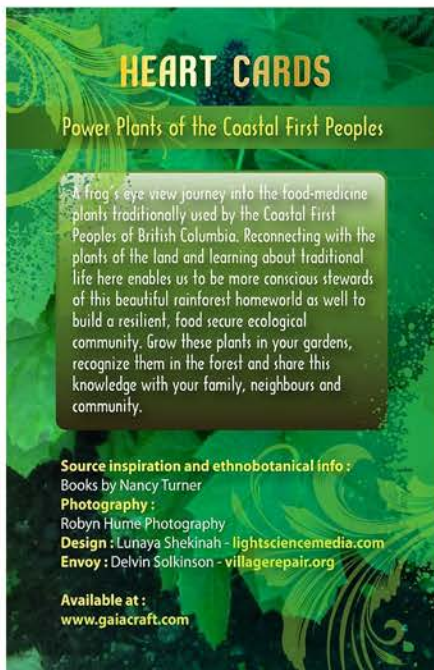
with many thanks to Elfinstones crystal shop
we will be open only during their hours

www.gaiacraft.com
www.villagerepair.org

envoy : delvin@cosm.org
design : lunaya-shekinah.com
photo : mortalcoilmedia.com



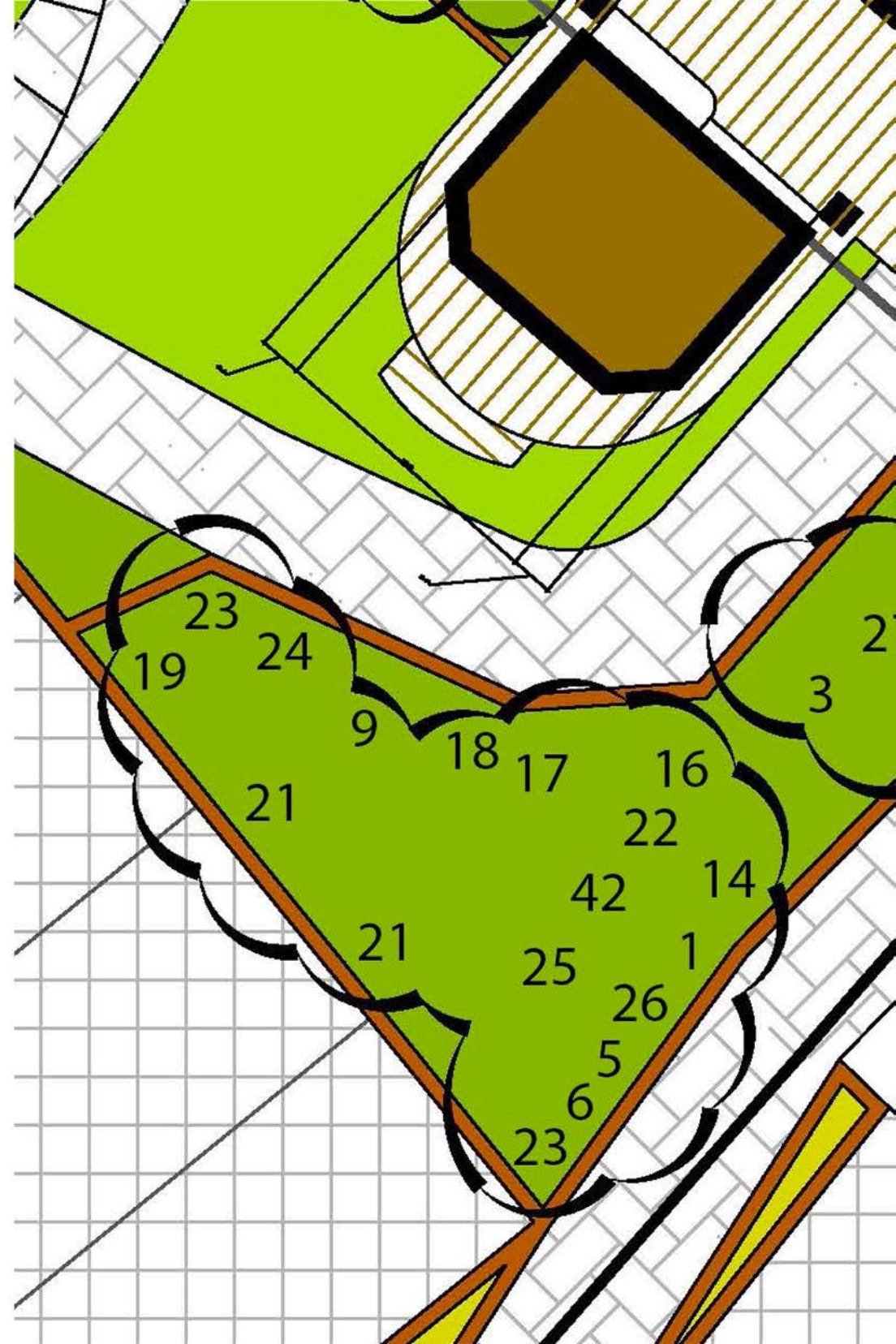




Plant Community

Plants are located in every garden bed.
This food micro-forest 'Alabaster Terrace' has a plant design list in the 'Educational Goals' section

1. Small-Flowered Alumroot - *Heuchera micrantha*
2. Large-Leaved Avens - *Geum marcophyllum*
3. False Azalea - *Menziesia ferruginea*
4. Sitka Burnet - *Sanguisorba canadensis* ssp *latifolia*
5. Henderson's Checker-Mallow - *Sidalcea hendersonii*
6. Red Columbine - *Aquilegia formosa*
7. Low Bush Cranberry - *Vaccinium vitisidaea*
8. Crowberry - *Empetrum nigrum*
9. Graceful Cinquefoil - *Potentilla gracilis*
10. Marsh Cinquefoil - *Potentilla palustris*
11. False Box - *Pachistima myrsinites*
12. Coastal Black Gooseberry - *Ribes divaricatum*
13. Entire-Leaved Gumweed - *Grindelia intergrifolia*
14. Black Huckleberry - *Vaccinium ovalifolium*
15. Bog Laurel - *Kalmia polifolia*
16. Arctic Lupine - *Lupinus arcticus*
17. Partridgefoot - *Luetkea pectinata*
18. Northern Flag Iris - *Iris setosa*



19. Blackcap Raspberry - *Rubus leucodermis* 20. Native Raspberry - *Rubus idaeus* 21. Reed Canary Grass - *Phalaris arundinacea*
22. Bog Rosemary- *Andromeda polifolia* 23. Service Berry - *Amelanchier alnifolia* 24. Silverweed - *Potentilla anserina* 25. California
Waxmyrtle - *Myrica californica* 26. Yarrow - *Achillea millefolium* 27. Canada Blueberry - *Vaccinium myrtilloides*

Throughout : Great White Camas - *Camassia leichtlinii*, Common Camas - *Camassia quamash*, Great Blue Camas - *Camassia leichtlinii*, Cusick's Camas - *Camassia cusickii* 'alba', Blue Melody Camas - *Camassia quamash*, Great White Camas - *Camassia leichtlinii*, San Juan Camas - *Camassia quamash*, Orion Camas - *Camassia quamash*, Variegated Blue Camas - *Camassia quamash*, Blue Danube Camas - *Camassia quamash*, Common Camas - *Camassia quamash*, Great Camas - *Camassia leichtlinii*, Coastal Strawberry - *Fragaria chiloensis*, Mountain Strawberry - *Fragaria vesca*, Woodland Strawberry - *Fragaria virginiana*



Harvests

The harvests of flowers, leaves, fruit, vegetables, roots and seeds have been documented and organized into a calendar of harvests all year round.

August

flowers : beans, bleeding heart, boysenberry, calamint, comfrey, daylily, foxglove, goji berry, goldenrod, gumweed, hardhack, hedge nettle, hyacinth, hops, lily (tiger), lupine (arctic and big leaf), mint, morning glory, motherwort, mugwort, poppy (california orange + yellow), sage (white), silverweed, st. johns wort, sundew, tsi, wintergreen, yarrow

leaves : basil, catnip, chives (green + garlic + winter), comfrey, dandelion, day lily, hosta, labrador tea, lavender, lemon balm, mint (spear, pepper, chocolate), nettle (stinging), onion (geyer, nodding, hookers + welsh), oregano, parsley (flat leaf + conventional), sorrel (redwood + sheep), sage (purple + white), sorrel (redwood), strawberry (coastal, wild, woodland), sweet cicely, sweet gale, sweet grass, thyme, tsi, vanilla leaf, valerian, violets, yellow dock, yarrow.





native flowers : pearly everlasting

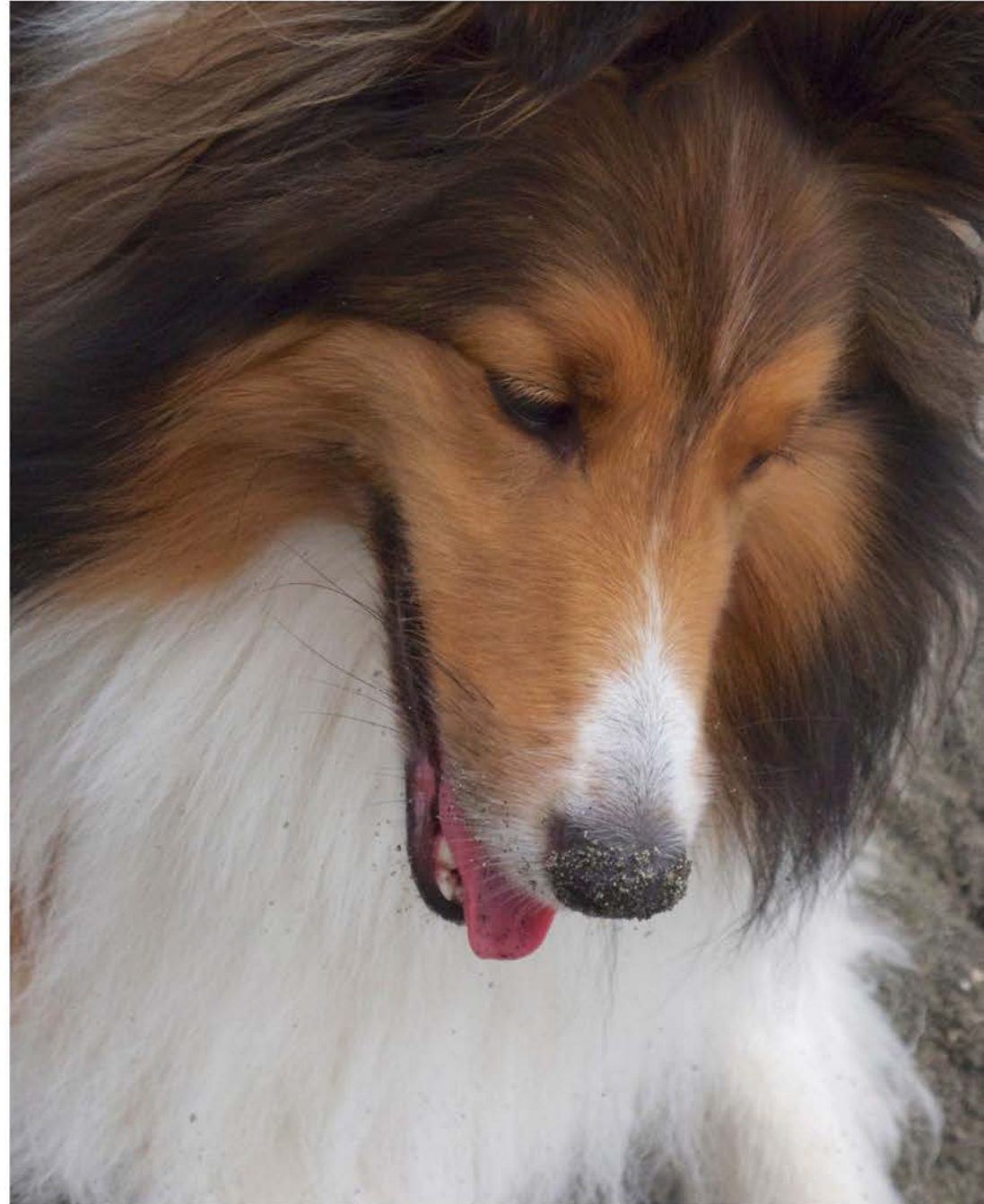
edible flowers : bergemot (wild), catnip, chamomile, chives, clover (red), hyacinth, lavender, lemon balm, oregano, rose (cement + everybearing)

roots : burdock, camas, dandelion, ferns (lady, licorice, spiny wood,sword), lily (black, chocolate, tiger, fawn white and pink), lupin, silverweed, sunchoke, waterleaf (pacific), yellow dock.

fruit : apple (crab, liberty), blackberry, boysenberry, chokeberry, currant (champaign + red flowering + white flowering + golden), cranberry (low bush, highbush, high), elderberry (black + blue), gooseberry (gummy), huckleberry (red), mountain ash, oregon grape (dull + tall), pear, raspberry (golden + red + native), salal, serviceberry, thimbleberry

vegetables : beans (pole + bush), bok choy, chard, cucumber (lemon), kale (black, red russian, curly), onion (egyptian + geyers + hookers + nodding), lettuce, zucchini

seeds : camas, columbine (pink + red), daylily, lupine (big leafed), reed canary grass, poppy (california yellow + orange), sweet cicely.





Thrushes, robins, jays, starlights, crows, eagles, sparrows, sapsuckers, bees, butterflies, dragonflies and ladybugs live here.

Zones

This design methods focussing on relative location, where elements are located in relation to center of energy, use, upkeep and scale.

The Self : Visit all the Time
Therapy and Healthy Diet.

Home : Visit Everyday
Classroom and food-medicine storage.

Doorstep : Visit Most Days
Stinging nettles and berries.

Garden : Visited regularly
Polycultural perennials.

Food Forest : Visited regularly
Mixed in with garden here.

The Farm : Visit Weekly
Community Garden + Raspberries.

Woodland : Visit Monthly
Hedge.

Wild : Visit rarely, view often
Ancient climax forest 20 minute drive
with truck. Ocean 1/2 block away.



HEART GARDENS MICRO-SECTORS

envoy : delvin solkinson www.gaiacraft.com

heart map : steve christian : [second nature design](http://secondnaturedesign.com)

graphic design : lunaya shekinah www.lunaya-shekinah.com

↑
FOREST

↓
OCEAN

HEALTH FOOD
STORE

POST
OFFICE

YOGA
STUDIO

ELFINHOME
ECO-EDUCATION
CENTRE

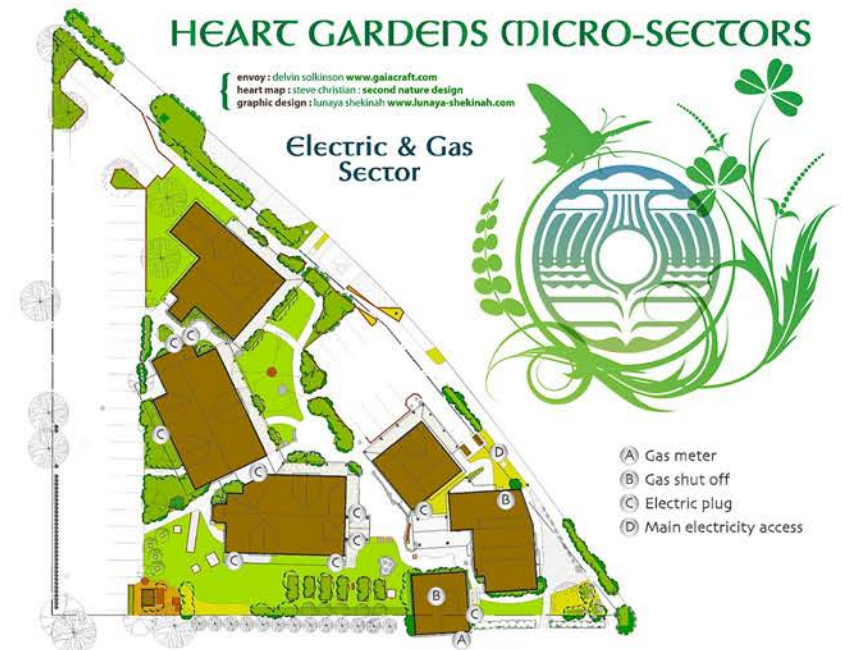
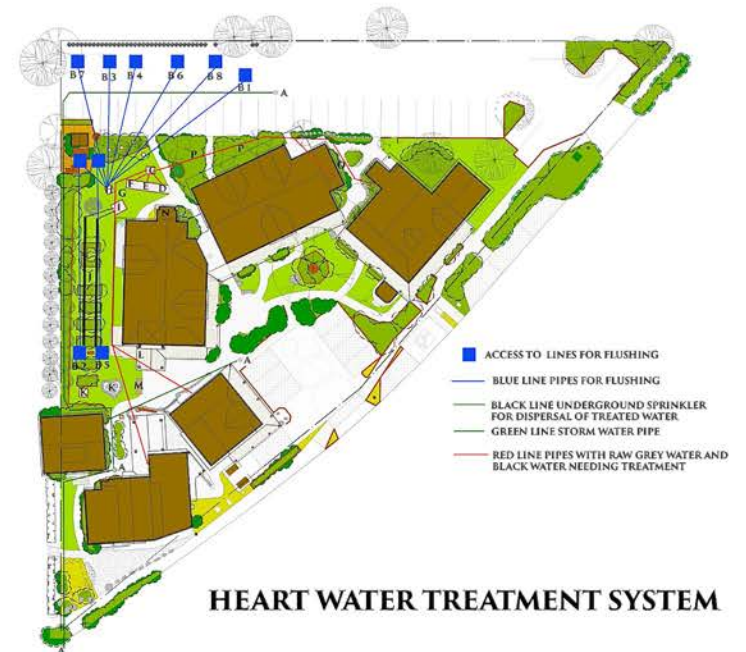
- ZONE 5
- ZONE 4
- ZONE 3
- ZONE 2
- ZONE 1
- ZONE 0
- ZONE 00



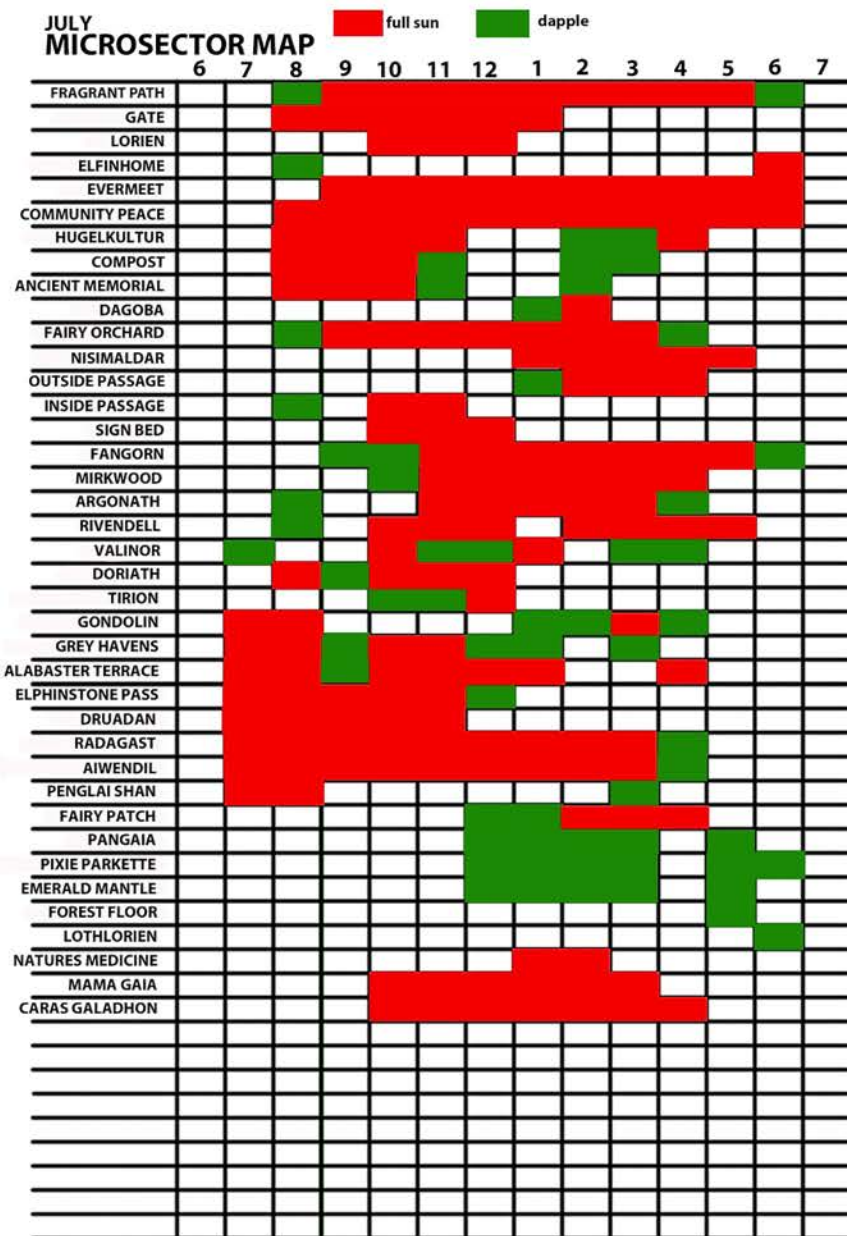
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Movement :
 — **Animals**
 — **People**



The water sector includes charting a major black water treatment system to process onsite water from sinks and toilets.

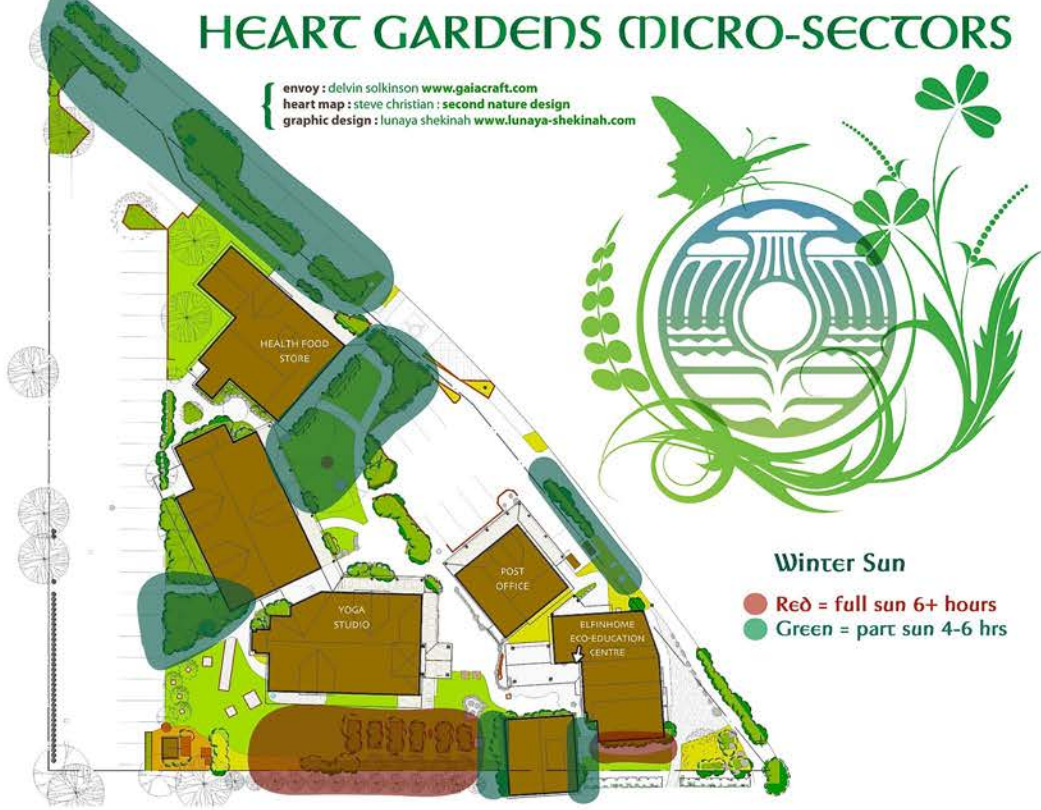


1. **Fragrant Path** dappled 8 - 9 + 6 - 7, full sun 9 - 6
dappled = 2 hrs full sun = 9 hrs
2. **Gate** full sun 8 - 2 pm
full sun = 6 hrs
3. **Lorien** full sun 10 - 1 pm
full sun = 3 hrs
4. **Elfinhome** dappled 8 - 9 am
dappled = 1 hr
5. **Evermeet** full sun 9 - 7 pm
full sun = 10 hrs
6. **Community Peace Gardens** full sun 8 - 7 pm
full sun = 11 hrs
7. **Hugelkultur** dappled 2 - 4 pm, full sun 8-12 + 4 - 5
dappled = 2 hrs, full sun = 5 hrs
8. **Compost** dappled 11-12 and 2-4 pm, full sun 8-11
dappled = 3 hrs, full sun = 3 hrs
9. **Ancient Memorial** dappled 11 - 12 + 2 - 3 pm,
full sun 8 - 11 am
dappled = 2 hrs, full sun = 3 hrs
10. **Dagoba** dappled 1 - 2 pm, full sun 2 - 3 pm
dappled = 1 hr, full sun = 1 hr
11. **Fairy Orchard** dappled 8-9 + 4-5 pm, full sun 9-4
dappled = 2 hrs, full sun = 7 hrs
12. **Nisimaldar** full sun 1 - 6 pm
full sun = 5 hrs
13. **Outside Passage** dappled 1 - 2, full sun 2 - 5 pm
dappled = 1 hr, full sun = 3 hrs
14. **Inside Passage** dappled 8 - 9, full sun 10 - 12
dappled = 1 hr, full sun = 2 hrs
15. **Sign Bed** full sun 10 - 1 pm
full sun = 3 hrs
16. **Fangorn** dappled 9-11 + 6-7, full sun 11 - 6 pm
dappled = 2 hrs, full sun = 7 hrs
17. **Rivendell** dappled 8 - 9, full sun 10 - 1 and 2 - 6 pm
dappled = 1 hr, full sun = 7 hrs
18. **Valinor** dappled 7 - 8 and 11 - 1 and 3 - 5,
full sun 10 - 11 + 1 - 2 pm
dappled = 5 hrs, full sun = 2 hrs

19. **Doriath** dappled 9 - 10, full sun 8 - 9 and 10 - 1 pm
dappled = 1 hr, full sun = 4 hrs
20. **Tirion** dappled 10 - 12, full sun 12 - 1 pm
dappled = 2 hrs, full sun = 1 hr
21. **Gondolin** dappled 1 - 3 and 4 - 5, full sun 7-9 and 3-4 pm
dappled = 3 hrs, full sun = 3 hrs
22. **Grey Havens** dappled 9 - 10 and 12 - 2 and 3 - 4 pm
full sun 7 - 9 and 10 - 12 pm
dappled = 4 hours, full sun = 4 hours
23. **Alabaster Terrace** dappled 9 - 10,
full sun 7 - 9 and 10 - 2 and 4 - 5 pm
dappled = 1 hr, full sun = 7 hrs
24. **Elphinstone Pass** dappled 12 - 1, full sun 7 - 12 pm
dappled = 1 hr, full sun = 5 hrs
25. **Druadan** full sun 7 - 12 pm
full sun = 5 hrs
26. **Radagast** dappled 4 - 5, full sun 7 - 4 pm
dappled = 1 hr, full sun = 9 hrs
27. **Aiwendil** dappled 4 - 5, full sun 7 - 4 pm
dappled = 1 hr, full sun = 9 hrs
28. **Penglai Shan** dappled 3 - 4 pm, full sun 7 - 9 am
dappled = 1 hr, full sun = 2 hrs
29. **Fairy Patch** dappled = 2 hrs, full sun 2 - 5 pm
dappled = 2 hrs, full sun = 3 hrs
30. **Pangaia** dappled 12 - 4 + 5 - 6 pm
dappled = 5 hrs
31. **Pixie Parkette** dappled 12 - 4 + 5 - 7 pm
dappled = 6 hrs
32. **Emerald Mantle** dappled 12 - 4 + 5 - 6 pm
dappled = 5 hrs
33. **Forest Floor** dappled 5 - 6 pm
dappled = 1 hr
34. **Lothlorien** dappled 6 - 7 pm
dappled = 1 hr
35. **Nature's Medicine Bed** full sun 1 - 3 pm
full sun = 2 hrs
36. **Mama Gaia** full sun 10 - 4 pm : full sun = 6 hrs
37. **Caras Galadhon** full sun 10 - 5 pm
full sun = 7 hrs

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heart map : steve christian : second nature design
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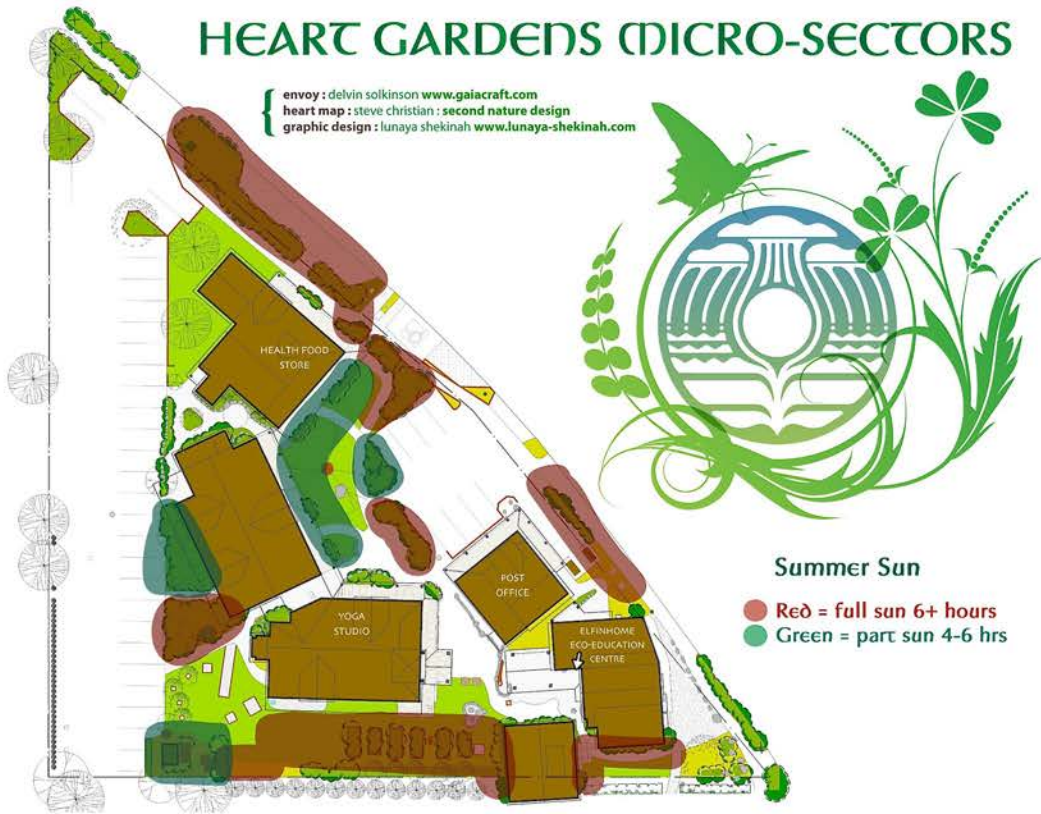
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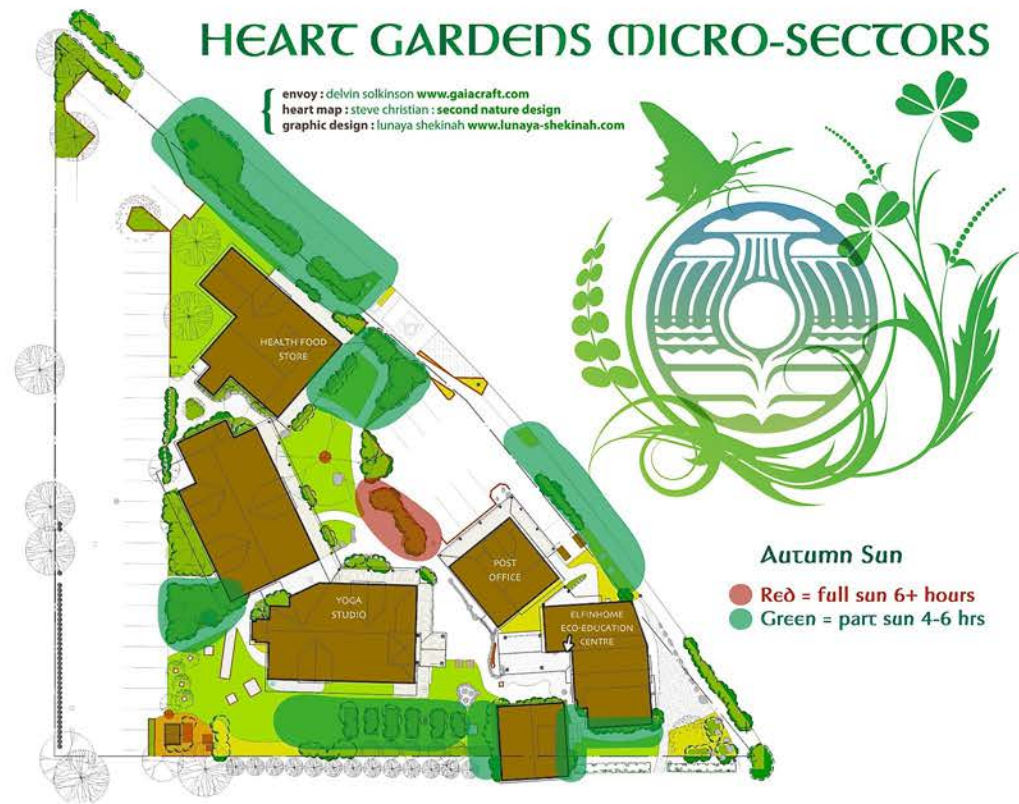
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I co-host free garden tours and free introductory days.



This classrooms is also a seasonal location for our PDC, APDC and Diploma Activation course days.

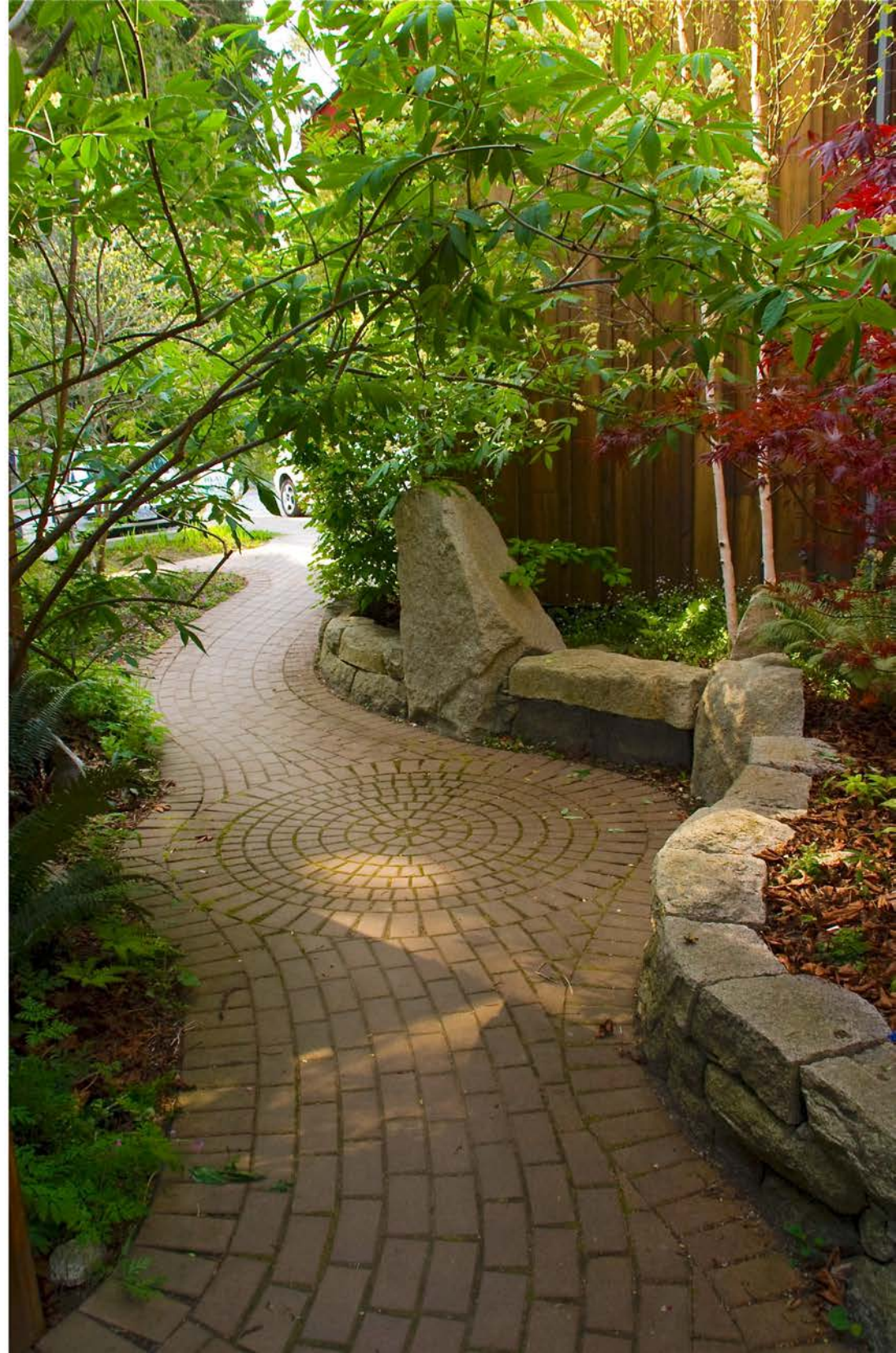
Needs and Functions

Needs

- maintenance and care
- mulching over winter and summer
- garbage, cigarette butt and dog poo cleanup
- lawn cutting for half the year
- watering during summer drought only
- composting upkeep
- soil food from biodynamic vermiculture and composting systems

Functions

- living classroom for all ages
- community education
- seed library to support local growers
- cuttings, roots and plant material as a gene library
- connect people and permaculture
- encourage organic gardens and farms
- a social gathering place to support community building and relationships
- opportunity for locals to get plot at community garden
- connect people, plants and animals
- inspire stewardship of the local mountain and watershed as well as all of nature on our planet





SWOC

Strengths

- open to public
- protected by the Official Community Plan which prevents corporate presence or conversion to living quarters
- gardening position and supporting finances to keep up the property provided by a diversity of the 20 or so renters of the property and the land owners

Weaknesses

- limited amount of resources to invest in the property the last number of years beyond my hours for working
- winter freezes and summer drought

Opportunities

- the property is currently for sale, perhaps the new team will have more resources to invest in its development
- lots of room to integrate local schools to use the gardens as a classroom

Contraints

- its a public place with lots of wear and tear, children and dogs walk on the gardens and trucks drive with their bumpers right into gardens and its shrubs and trees

AEIOU

Awareness

- the gardens are still young and not yet established
- this is a legacy project so its important get very organized to support future gardeners and stewards

Exploration

- a keynote is community education so signage and maps are an important component that needs more work

Inspiration

- finding ways to include local teachers, students and classes is a key way to bring more energy and fulfill the gardens mandate

Ownership

- the property is owned privately
- the sale of the property will include a new ownership team
- involving people in the community gardens and using the classroom as a garden will give them ownership
- inspiring locals involvement may lower dog poo and litter

Undertaking

- finishing brick pathways and parking





Ethics

Earth Care

- the gardens intend to demonstrate earth loving design including organic practices with biodynamic fertilization and no use of pesticides or chemical fertilizers
- integrated pest management attracts predators and removes pests without traps or poisons

People Care

- the gardens with all their seating, feature areas, beautiful scents, smells and tastes are intended to support the Heart of the Creek as the center of the community and gathering place for everyone who lives in this tiny village

Future Care

- with a population of 3000, the village is growing slowly due to development restraints of the Official Community Plan, the gardens provide information and support for tiny home ecovillages on a sub-urban scale that can help the surrounding community to grow
- this design is part of leaving a legacy of learning for future gardeners and community members to learn from and care for the gardens

Observation Principle

The gardens have a well established ground cover layer in most areas but lots of weeds like morning glory, vetch, lamb's quarter, dandelion, yellow dock, burdock, horsetail, and thistle appear regularly. Knowing that these are all composting super plants, then I no longer weed them, I only harvest them. They are no longer weeds because of their recognized and utilized function.

There are number of people and dogs that hang around the gardens alot. In some ways these are like non-plant weeds as they leave a trail of dog poo, cigarette butts and garbage which needs to be cleaned up. All these people and dogs are part of the community so I recognize that they are playing a key function in the system in some way. I try to keep the gardens clean and beautiful as well as having plant food and water available for people and dogs year round.





EMBRACE WEEDS

Weeds are high nutrient soil feeders and stabilizers. They are used by nature to feed, decompact and protect damaged areas. Many weeds are nutritious and medicinal for people.

Can you identify weeds and their uses on your property to upgrade the health of your garden and yourself?



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Permaculture Principles Design Deck
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Pollenate



Anchor Points

I went deeper into reorganizing the design web and explored dyads, anchor points that worked super well together as a pair.

Looby Macnamara has taught me that *each anchor point opens the design up a bit more.*

This has been my approach to the design. It will be awesome to come back later, reading through the design and upgrading it in a number of areas.

Learning the Design Web by applying it is profound and insightful. This creative toolkit opens up a bit more each time I use it and understand it deeper.

I can see how each anchor point is the combination of a number of different principles, an integrative synthesis of permacultures principles and design methodologies.

Principles

What does it tell me about my current state?

The gardens are set up to help me find the others. I have located plants that can grow easily and abundantly in this year. These plants as well as bird houses, bat houses and mason bee homes, also attract in the local birds and insects that will work well in my garden guild. The gardens with their signage, tours and workshops attract in a variety of locals interested in gardening, sustainability and permaculture, helping to support my practice and the classes I offer. The gardens also inspire more conscious tenants and businesses to take residence here. I am naturally an introvert so being outside in the main community area most days gets me out of my shell and enables me to find friends and allies in the local community who are here often, and from the global community who visit and pass through.





Vision

What are the abundances I would like to create in my life?

I would love to have a routine that supported me to harvest more food and medicine from the gardens. I live within them and have carefully documented all the harvests in each month, I just need to take the next step and harvest, preserve and process the food and medicine as it becomes available.

I would also like to organize the timing of people harvesting roots, cuttings and seeds to help organize and activate the community to use the gardens more and spread the carefully selected genetic material around this bioregion.

My long term vision is that the new ownership team will love me, recognize the value of my offering and my ability to know the leverage points for very efficient and effective use of my time in the gardens. In this light I hope they let me keep my job and home here deep into the future.

Limits

Why would I not want to change?

My work in the gardens is a dream job so far. I am on my own schedule and mostly my own boss. I know my responsibilities and can fulfill them with ease. This stress free job is not only right livelihood but its also super healthy for my body and mind. This is regenerative work. I have become pretty entrenched into routines and habits here. This design is helping me to overcome my limits and get more creative with design ideas instead of mostly focussing on maintenance and upkeep. Although large investments in the property are not happening due to the pending sale, I do have a few days hardscaping work with Esco this year and will make the most of it.



Helps

What external resources are available?

Since this is a public space, even though its privately owned, I may be able to access more plants at a discount, trade or even for free from local nurseries. The plant community has not been added to significantly for a few years and would benefit from some new species. There are many more gardeners and permaculture designers here each year, their energy and interest could result in more people utilizing and enjoying the gardens, fulfilling its core function. The eco-education center is not heated but Kym Chi may donate a solar panel which would look great and help preserve the building against mold issues. Perhaps I could pair with local media to help promote.



Pause

How can I make times of rest and quiet a built-in part of my design?

This design is providing the perfect pause in the depths of winter to get a break, assess and evaluate what is happening and how to move forward.

I do leave on outreach every 1-2 months to New York or elsewhere to get regular breaks. This results in me always being happy to be home and working in the gardens. Because of this I am never bored or tired of working, I am always inspired and grateful to have this amazing job.

It's been a while since I updated the sector observations, plant and animal lists. This winter and I will go through the gardens and put in small metal plant signs and check the plant lists to see if any species were lost. This will also provide a beneficial pause from simple labour.

I would love to stay in the gardens forever and grow old with them. This is a perfect location and gentle, healthy, honest work





Patterns

What patterns of success from another area of my life can I translate into my design?

I have noticed that having a diverse amount of different media, banners for Facebook, square graphics for instagram along with worksheets and other free learning resources really helps a continual promotion of projects. With all the amazing photos of the gardens perhaps I could get a promotional media kit to help me keep the Heart Gardens alive in the social media and support its evolution as a pilgrimage place for eco-tourism.

Accessibility and usability is key in all my work. I can reorganizing the Elfinhome eco-education center as well as putting up a few promotional posters around the town to draw attention to the educational aspects of the gardens and the Elfinhome as a free resource to utilize.

Ideas

What big, little, practical, routine ideas do I have?

I would love to install large capacity water storage tank behind the Health Food Store and one more rain barrel as a display. We have droughts in the summer and this would be a great help as sometimes we are not allowed to water.

The pathways in the front of the property are intended to be brick. The front parking lot is also supposed to be finished as a community courtyard that can better support the farmers market, small festival and other community events. It would be fantastic to complete this expensive task, perhaps with the inspiration of the new ownership team.

An expansion of the community garden would be great as it has more interest. Perhaps a raised key hole bed would add diversity and feature interest. I will bring this up again with the woodworking school that may be able to help construct it then be able to use it for their students.





Permaculture gardens often feature an iconic herb spiral. I do have left over bricks from a heritage site across the street. Perhaps these could be used with hugel material to create a herb spiral next to the community garden.

Another idea I have been musing on with Dana Wilson is creating a community recycling station. Currently the main garbage area on site has only cardboard recycling. There is a private person who comes to pick up recycling from individual tenants but perhaps this could be build into the rent of everyone. Some of the local community use the garbage without permission which could also be addressed, perhaps with a simple lock and keys for all tenants.

A lemon balm micro-hedge in the shade in front of the Post Office would help prevent slipping that happens when people walk over the wood barrier. Gardens may encourage people to walk around on the pathways.

Action

What resources do I need?

- more plants to expand collection
 - bring in a round of local organic worm tea to feed gardens with
 - get rock dust to remineralize gardens with
 - sift compost for fertilizer
 - more Lee Valley metal plant signs
-
- Redo and upgrade the Heart Garden maps, both the large displays and the small maps given freely in the Elfinhome. Perhaps the printing costs would be covered by the Regional District once again.
 - Add more learning resources to upgrade the Elfinhome and refresh it
 - Complete this design and print a copy of it as a hardbound book for my home classroom and for the Elfinhome (\$130 per copy)
 - Upgrade the worksheet showing guild plant lists for the Food Micro-Forest Gardens here as some of the species have shifted





- pay Native Plant expert to come in and do consulting
- deepen relationship with Sunshine Coast Seed Savers so Seed Library is stocked better
- support and encourage the Chi Gong, Yoga and other activities that happen out in the gardens
- install more informal seating
- build new gardens at edges
- establish exact location of expanded property line and redo map
- install signs for individual plants
- research possibility of some larger signs
- create invitational package for local elementary schools to use the gardens
- develop more all ages curriculum for garden tours
- design in more native plants that provide winter food for wildlife
- more flowering plants for early spring and late autumn bee fodder

Momentum

How am I going to build and increase momentum?

- coming and going from the gardens (and country) really keeps me motivated and passionate to work hard when I am around (this year I am off-coast a few times a month and out of the country for a week or two many months)
- building new gardens or installations really builds momentum for me as I see it every day and people from the local community will comment and compliment for months
- this design is building momentum and stoking my passion for permaculture and love of the heart gardens





Integration

What are you actually trying to achieve with the design?

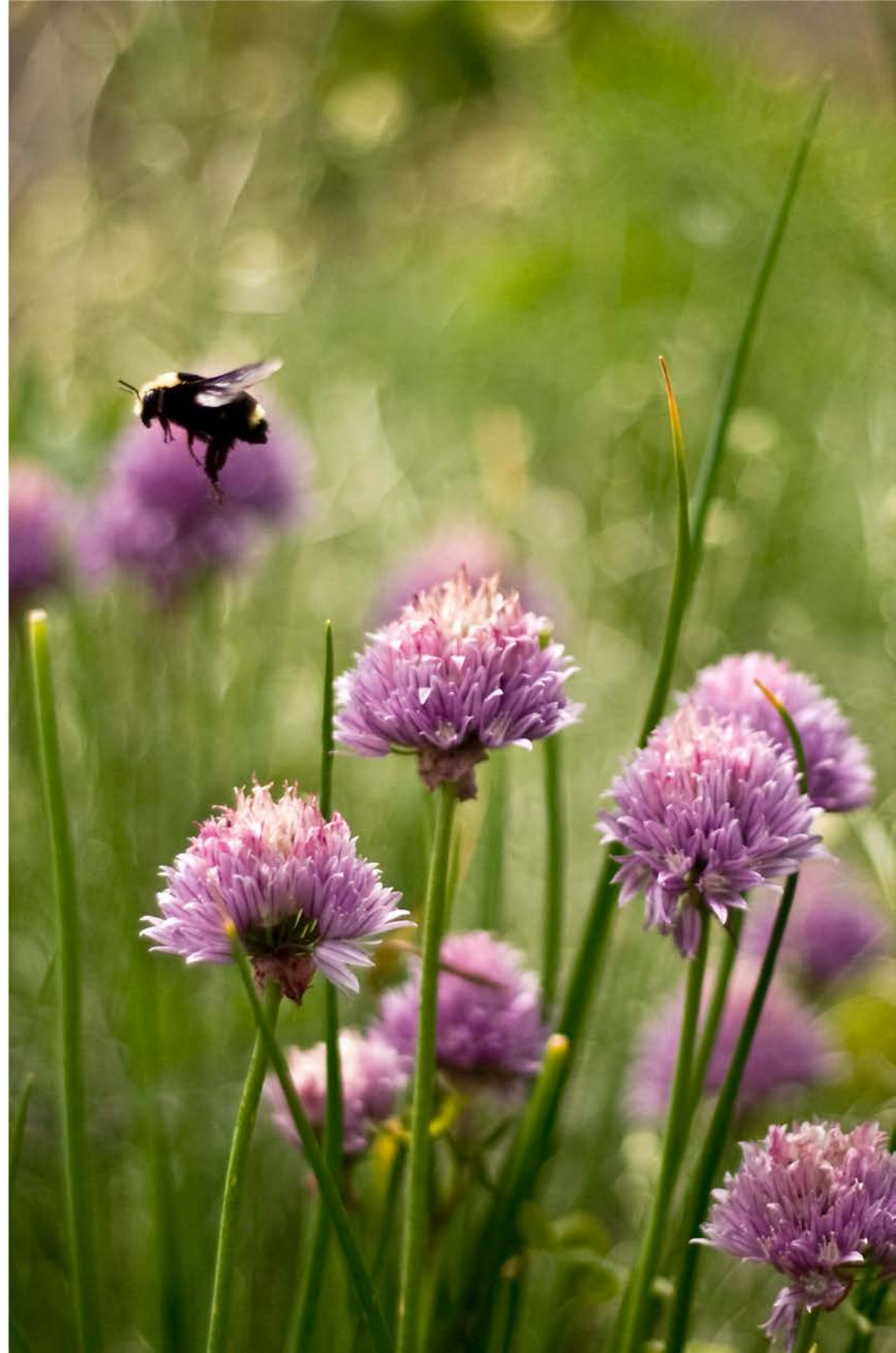
I am working to create a community permaculture demonstration site which is reframing the downtown of my village as a educational classroom. The site is designed with an eye to regional food security, local water storage and community energy. The integrative design goal is for overall resiliency in relation to the changing climate; environmental, political and economic.

David Holmgren advised me to build a life ship and this garden represents that for the community with its 372 species of perennial food-medicine plants and alot more potential as an inclusive classroom for all ages education.

I will use another design method provided by the maestro Michael Becker that he calls
Permie for Permies
to go deeper into this integration anchor point

Needs Development

- Create non-profit organization for supporting educational gardens, farmers markets, ecovillages and other green initiatives
- Use the non-profit to apply for grants to help with the new water storage system, signage, plant collection and placemaking features like increased seating
- Investigate grants for developing and printing new educational materials or developing free videos to share online
- Consider setting up an onsite nursery with transplant-to-order service
- Prepare to build inspiring and positive relationship with the new ownership team when the property sells





Personal Sustainability

I am joyed to be working 80 hours a month which covers the rent and bills in my onsite apartment with a bit of money for food too!

It's a humble and fair wage for this simple work and does support my root needs perfectly. Its flexible so I can travel to teach. My goal, perhaps within the timeframe of this Diploma, to bring in more of a regenerative income from teaching.

The job is also flexible for me to travel to take permaculture courses, see sacred sites and volunteer 1/4 time at a non-profit arts organization in New York as my dear friend and Heart Steward Vacio Cielo is able to care for the gardens in my absence and he is also supported with others who can back him up as needed.

2



VILLAGE REPAIR FOOD MICRO-FOREST GARDEN

FOREST GARDEN GUILD

Edibility: Fruit, Berries, Nuts, Oil, Leaves, Roots, Starch, Inulin, Vitamin C, Teas

Traditional Ethnobotany:

Medicines for heart complaints, tooth pain, intestinal disorders, eyes, organs and skin, digestion, and blood pressure. Includes female tonic, and healers of stomachic issues, diarrhea, dysentery, kidney stones, respiration, colds, coughs and fevers. Produces a smoking blend tobacco substitute and series of vitalizing teas.

Tool making: Hard wood for tools like bows, tool handles, pegs and fish hooks, digging sticks, cooking and drying racks, building poles, and arrows. There is pliable materials for basketry, as well as rope and string. The guild also provides wax for burning, essential oil perfume, and insect repellents. Blue, Red and Yellow Dye is traditionally made from plants in this community.

Beneficial Ecological Function:

Pollinators, nitrogen fixers, living mulch, sentinel plants, insectary plants, beneficial animal and insect attractors, native habitat, repels pests and rodents, kills mosquitoes and fleas.

Food for: red squirrels, chipmunks, birds, bees, butterflies, honeybees

Attracts birds: Hummingbirds, song birds, grouse, warblers, sapsuckers, woodpeckers, towhees, sparrows, grosbeaks, robins and countless others.

SHRUBS

Malus Fusca - Pacific Crab Apple

Bloom Time: (Spring) May June

Edibility: Keystone plant of the Coastal First Peoples. Apples are easy to store for long periods of time.

Medicine: Medicine for the eyes, organs and skin. Tool making: Hard wood for tools like bows, handles, pegs and fish hooks.

Beneficial Ecological Function: Universal Pollinator for Apples. Attracts beneficial insects. Food for birds.

Water: drought tolerant

Soil: hearty and tolerant

Sun: Sun - Part Shade

Corylus Cornuta - Beaked Hazelnut

Bloom Time: Caribou (Winter) February-March

Flowers (Spring) April-May

Edibility: Nutritious seeds store for a year. The only native plant source for nuts and oil here on the coast.

Traditional Medicine: heart complaints, tooth pain and intestinal disorders.

Tool making: Basketry, arrows, blue dye, rope and string.

Beneficial Ecological Function: Nuts are eaten by native squirrels and birds.

Water: drought tolerant

Soil: hearty and tolerant

Sun: semi-shade to sun

Design: Lunaya Shekinah - www.lightscienceanddesign.com

Envy: Delvin Salkinson - www.villagerestaurant.com

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1



VILLAGE REPAIR FOOD MICRO-FOREST GARDEN

producing native trees which reflect their cousins across the street (also crab apples and hazelnuts). Under the trees are sentinel plants to break up the soil and prevent crowding from other plants while attracting birds, bees and butterflies. Between the trees are native berry bushes feeding people and attracting birds, below which is an edible groundcover as a living mulch and beneficial insect attractor. This is the start of the guild and its main components, other small herbaceous level plants will be added later to enhance diversity and ecological function.

SEASONAL INTEREST

Winter: January, February, March

Growth: Hazelnut, Caribou, Sweet Gale

Berries: Bearberries

Greenery and Foliage

Spring: April May June

Flowers: Crab Apples, Hazelnuts, Soodollie,

Sweet Gale, Serviceberry, Strawberries, April Black

Lily, May Chocolate Lily, June Camas

Harvests: Hazel Nuts

Summer: July, August, September

Flowers: Labrador Tea, Kinnickinnick, Nodding

Onion, Camas, July Tiger Lily,

Harvests: Crab Apples, Buffalo Berries, Service-

berries, Strawberries

Autumn: October, November, December

Flowers: deciduous leaves provide the color

Harvests: Dogwood Berries, Bearberries

Foliage: Serviceberry changes colors.

This hearty native perennial foodscape fulfills beauty and ecological function while addressing pressing issues around food security for our uniquely conscious rainforest village. Celebrating the food and culture of the Coastal First Peoples, it reflects a diversity of relationships between plants, animals and people. This is part of a Roberts Creek Village Repair initiative to create place for people to gather, learn, share and help build a relocalized and resilient community future.

As people walk, pedal or drive down the road into the Village Center they will enter into beautiful gardens. Following the red brick path next to Heart of the Creek takes people and pets through shades of seasonal color and delicious foodstuffs they can eat as they pass by. Signage will help people learn about the plants, their functions and edibility as well as their place within the Cultures of the Land. The forest garden dapples the transition from bustling village center to the cement road and its traffic. On the other side of the red brick path is the Heart Gardens plant community of 250 species of perennial food including 150 species of native perennials used traditionally as food-medicine plants.

Featured in this Food Micro-Forest are keystone food

Design: Lunaya Shekinah - www.lightscienceanddesign.com

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VILLAGE REPAIR FOOD MICRO-FOREST GARDEN

Serviceberry - Amelanchier alnifolia

Bloom Time: Flowers (Summer) April and May Foliage (Autumn)

Edibility: berries were an important plant food used by the First Peoples. Perminian was made by pounding dried service berries with dried meat.

Traditional Medicine: stomachic, fevers, flu

Tool making: Arrow shafts, digging sticks and building poles were made from the hard, straight-grained wood. Slat armor and shield.

Beneficial Ecological Function: Numerous birds eat the fleshy fruits and find shelter among the branches. This species is able to re-sprout after fire. A great source of pollen and nectar for bees and butterflies.

Water: likes moist

Soil: Occurs on a variety of well-drained soils.

Sun: Semi-shade or sun

GROUND COVER

Coastal Strawberry - Fragaria Chiloensis

Bloom Time: Flower (Spring) April May Fruit (Summer)

June July

Edibility: Berries and leaf tea

Traditional Medicine: female tonic, burns, diarrhea

Tool making: woven headbands

Beneficial Ecological Function: living mulch, attracts butterflies, bees and birds

Water: drought tolerant

Soil: soil tolerant

Sun: sun or shade

Woodland Strawberry - Fragaria Virginiana

Bloom Time: Flower (Spring) April May Fruit (Summer) June July

Edibility: Berries and leaf tea high in vitamin C

Traditional Medicine: female tonic, burns, diarrhea

Tool making: fruits help clean teeth

Beneficial Ecological Function: living mulch, attracts butterflies and bees

Water: drought tolerant

Soil: soil tolerant

Sun: sun or shade

Mountain Strawberry - Fragaria Vesca

Bloom Time: Flower (Spring) April May Fruit (Summer) June July

Edibility: Berries and leaf tea

Traditional Medicine: dysentery

Tool making: woven headbands

Beneficial Ecological Function: living mulch, attracts butterflies and bees

Water: drought tolerant

Soil: soil tolerant

Sun: sun or shade

Kinnickinnick - Arctostaphylos Uva-Ursi

(located just under dogwood)

Bloom Time: May to June

Edibility: Fruit

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3



VILLAGE REPAIR FOOD MICRO-FOREST GARDEN

Traditional Medicine: Eyes, skin, digestion, blood pressure.

Tool making: Hair dye

Beneficial Ecological Function: Nitrogen

fixation. Attracts bees, butterflies and birds.

Water: Drought tolerant

Soil: Soil tolerant

Sun: Sun or Shade

Myrica gale - Sweet Gale

Bloom Time: (Winter-Spring) March - May

Edibility: Fruit and Herbal Leaves for teas or

soups.

Traditional Medicine:

Tool making: Wax for burning, yellow dye,

essential oil perfume

Beneficial Ecological Function: Nitrogen Fixing

and wildlife attracting. Repels insect pests. Said to

be used by sasquatches.

Water: likes moist

Soil: Soil tolerant

Sun: Semi-Shade or Sun

Ledum groenlandicum - Labrador Tea

Bloom Time: (Summer) July August

Edibility: vining tea

Traditional Medicine: skin and organ helper;

colds and sore throats

Tool making: insecticide and dye plant.

Beneficial Ecological Function: Pollen for bees.

Repels insect pests and mice. Kills mosquitoes and

fleas.

Water: Likes Moist

Soil: Soil tolerant, loves acidity.

Sun: Shade or semi-shade

Cornus Sericea - Creek Dogwood

Bloom Time: Flowers (Summer) May to July Berries (Autumn) October

Edibility: Berries eaten by interior peoples but not

preferred.

Traditional Medicine: Bark extract was used for treating coughs and fevers, and tea brewed from roots and stems was used to prevent and treat malaria. A

tonic plant. Some tribes smoked the inner layers of the bark as a tobacco substitute.

Tool making: Source of red dyes. Fibre for rope and basketry. Cooking and drying racks.

Beneficial Ecological Function: Berries are a preferred food and nesting site of many songbirds, particularly during fall migration. Flowers are an

important source of pollen for honey bees. Food for red squirrels and chipmunks.

Water: Prefers moist conditions.

Soil: Commonly occurs on moist, organic soils, but grows in a wide range of soil types.

Sun: Sun and Shade tolerant.

BUSHES

Shepherdia Canadensis - Soodollie

Bloom Time: Flowers (Spring) April May Fruit (Summer) July August

Edibility: Treasured fruit of the Coastal First Peoples.

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VILLAGE REPAIR FOOD MICRO-FOREST GARDEN

Water: drought tolerant
Soil: soil tolerant
Sun: part sun to sun

Camassia quamash - Common Camas
Bloom Time: (Summer) May June
Edibility: nutritious tuber, contains inulin
Traditional Medicine: Childbirth
Beneficial Ecological Function: feeds bees and attracts butterflies, sentinel plants to prevent weed crowding
Water: likes moist
Soil: soil tolerant
Sun: sun or shade

Fritillaria Camchatcensis - Black Lily
Bloom Time: (Spring) May
Edibility: bulb eaten as a Staple Food or used to make flour
Beneficial Ecological Function: sentinel plants to prevent weed crowding
Water: likes moist
Soil: soil tolerant
Sun: sun or shade

Fritillaria lanceolata - Chocolate Lily
Bloom Time: (Spring) April May
Edibility: high starch bulb was a staple food for Coastal First Peoples
Beneficial Ecological Function: sentinel plants to prevent weed crowding
Water: likes moist
Soil: soil tolerant
Sun: sun or shade

Traditional Medicine: The dried leaves were smoked as a tobacco substitute by combining dried leaves with the dried inner-bark of red osier dog wood, urinary infections, mouth wash.

Tool making: Dye, waterproofing.

Beneficial Ecological Function: The berries are eaten by various birds.

Water: Grows in areas with 8-45 inches of annual precipitation.

Soil: Occurs on a variety of soil types including sandy, acidic, and well-drained to excessively-drained soils.

Sun: Full Shade and Semi-Shadow or sun.

ROOT :

Allium cernuum - Nodding Onion

Bloom Time: (Summer) June July

Edibility: flowers, leaves, roots, contains inulin

Traditional Medicine: kidney stones, respiration, colds, sore throats

Tool making:

Beneficial Ecological Function: attracts hummingbirds, bees and butterflies, repels insect and rodent pests, insect repellent for humans, sentinel plants to prevent weed crowding

Design : Lunaya Shekinah - www.lightsciencedesign.com

Envoy : Delvin Solkinson - www.villagerepair.org



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Educational Goals

Inspire learning in the local community and its visitors about :

- native plants and their history of use by Coastal First Peoples including food, medicine, fuel, fibre, tools, art supplies, transportation, clothing, fodder and building materials.
- appreciation for how nature is designed and how we can use these designs to inspire our own sustainable developments
- importance of bird, bat and bee houses
- make use of the ocean, forest, creek and garden ecosystems the close area
- pair with other local farms and gardens that can host permaculture education classes
- permaculture ethics, principles, methods, strategies and techniques
- four season organic gardening
- conscious design and development of homes, gardens and farms
- watershed management
- inspire people to protect and conserve wild spaces on the mountain and ocean

Systems Connectivity

Design for Intangibles

- write articles about the gardens for local, regional, national and international magazines to inspire more eco-tourism
- send a curriculum kit to local schools with suggestions for how they could use the gardens freely
- get on instagram with photos of flowers and plant harvests including a fun fact and web link to PFAF
- create a dynamic public presentation and tour about the heart gardens for each season
- build out the heart gardens part of the website and include this design as a main feature
- gain non-profit status
- connect with the First Nations to build relationships



Cattails, Fireweed, and Yellowthroat
(1987) Robert Bateman



HEART GARDENS SOCIETY

The Heart Gardens Society is a non-profit dedicated to creating learning opportunities about native plants, habitat restoration, plant mapping, organic growing, sustainability education, eco-media, permaculture, bioregional ecology and whole earth stewardship. Working with support from School District 46 and the Sunshine Coast Regional District, the Heart Gardens Society has created a green map set for all ages ecology education. The Heart Gardens is a living classroom community garden and permaculture demonstration site in Roberts Creek specializing in plants with a history of use by Coastal First Peoples. There is an unstaffed eco-education center at the heart of the gardens with learning resources and green media.

We like to remember that an entire civilization lived on this land and got its food, medicine, cloths, art, buildings, tools, games and material culture from the local ecology. Native plants, animals and elements provided for all the needs of the Coastal First Peoples. Here are two plants with a long history of use by Coastal First Peoples. These plants are featured both in the Heart Gardens, and on the art from Robert Bateman on the front of this flier.

Cattails - *Typha Latifolia*

A native plant with interesting flowers that can be found in damp areas and marches. The grassy fiber was woven into mats which were used by Coastal First Peoples as walls or ceilings of summer dwellings, insulation for winter homes, saddle blankets, and carpet. Twine from cattail leaves was also used to make baskets, bags, hats and ropes. The fluff from cattail flowers was used as filling in pillows and mattresses.

Fireweed - *Epilobium Angustifolium*

This beautiful native plant can be found in open areas like clearings and logged areas. The inner part of the stem is sweet to eat and was used by many Coastal First Peoples as a green vegetable or tea plant. Fireweed was also used as a laxative and blood purifier. Fibers were twisted into twine for fish nets and combined with other plant materials for use in weaving. The fluff from fireweed flowers was used for padding.

For more information about native plants with a history of use by Coastal First Peoples see the work of Nancy Turner. The plant information here was sourced from her incredible books.

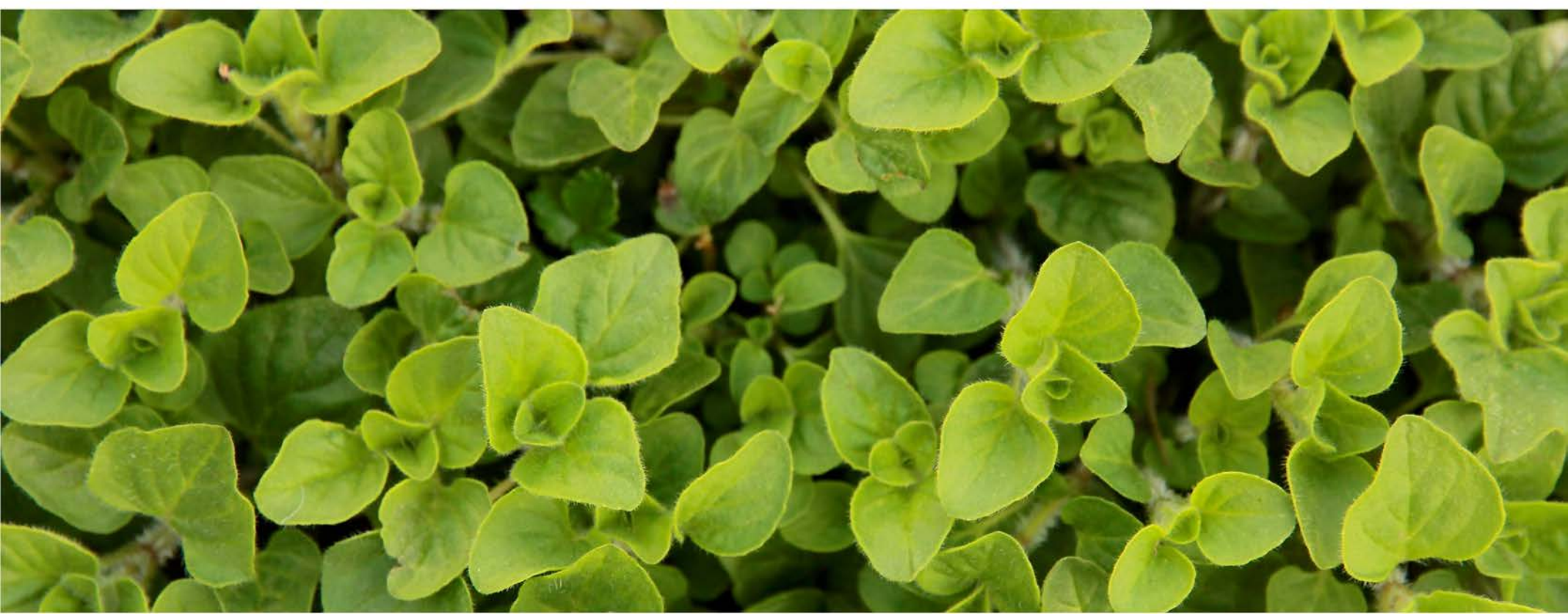
Nancy Turner. **Food Plants of the Coastal First Peoples.**
Royal British Columbia Museum Handbook. Vancouver : UBC Press, 1998.

Nancy Turner. **Plant Technology of First Peoples in British Columbia.**
Royal British Columbia Museum Handbook. Vancouver : UBC Press, 1995.

learning initiative : www.heartgardens.com
project stewardship : www.gaiacraft.com
media design : www.onbeyondmetamedia.com
flier art : www.robertbateman.ca

Roberts Creek Pathways Project

The social permaculture design includes gaining support of the Community Association, Official Community Planning Commission, Advisory Planning Commission, Sunshine Coast Regional District (SCRD), Roberts Creek Community School, Parent Advisory Council, School District 46 and a host of local conservation organizations. Also the SCRD is collaborating with local community to design pedestrian-oriented improvements. Funded primarily through the transfer of federal gas tax revenue, project focuses safety for pedestrians and bicycles with new pathways, gardens and seating. Thanks to the visionary Gregory Gebka, SCRD Planner who worked hard to create, guide and design this historic community process. This included expanding the Heart Gardens onto public land with a fedge micro-food-forest on a nature strip with organic soil and plants.



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DELVIN SOLKINSON : Curriculum Development : www.gaiaacraft.com
MISTER TOUR : Illustration : www.thetourshow.com
HEART MAP STEWARDSHIP : delvinilluminated.com

SUPPORTED BY LOCAL ORGANIZATIONS :

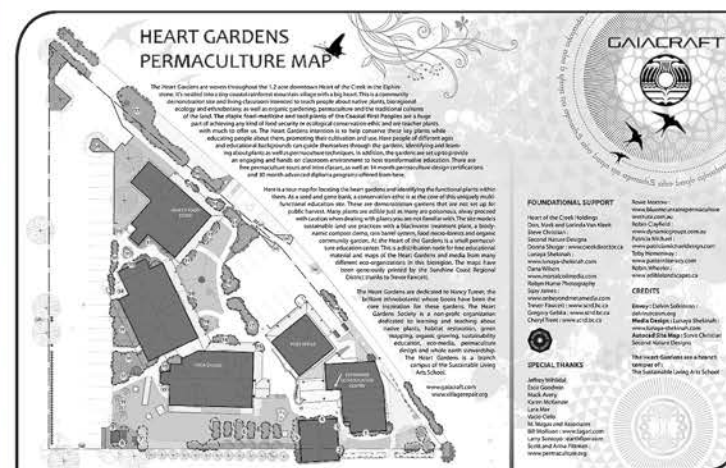
Roberts Creek Director : www.creekdirector.com
Roberts Creek Community Association : www.creekdirector.ca/organizations/rcca.html
RC Official Community Plan Commission : www.creekdirector.ca/organizations/opcc.html
RC Advisory Planning Commission : www.creekdirector.ca/organizations/apc.html
Roberts Creek Elementary Parents Advisory Council
Roberts Creek Co-Housing : www.robertscreekhousing.ca
Roberts Creek Information : www.robertscreek.com
One Straw Society : www.onestraw.ca
Food Action Network : www.onestraw.ca/foodsecure.html
Green Shores : www.greenhores.ca
Habitat Atlas : www.habitat.scrd.bc.ca
Sunshine Coast Botanical Garden Society : www.coastbotanicalgarden.org
Sunshine Coast Conservation Association : www.thescsca.ca
Sunshine Coast Community Employment Services : www.sccs.ca
Sunshine Coast Community Services Society : www.sccss.ca
School District 46 (Sunshine Coast) : www.scrd.bc.ca
Roberts Creek Community School
Gibsons-Elphinstone Community School
Schell-Chatelach Community School
Pender Harbour Community School : www.phcommschool.ca
Roberts Creek Community Elementary School : www.sd46.bc.ca/rcweb
Sun Haven Waldorf School : www.sunhavenschool.ca
Inside Passage Woodworking School : www.insidepassage.ca
Sunshine Coast Capilano University : www.capilano.ca/sunshine.html
Mount Elphinstone : The Land Teaches

SUPPORTED BY BIOREGIONAL PERMACULTURE EDUCATION :

Linnaea : www.linnaeafarm.org (BC)
PC Network : www.permacultureguild.net (BC)
Seattle Guild : www.seattlepermacultureguild.org (WA)
Wise Earth : www.wiseearth.org (WA)
Bullock's Homestead : www.permacultureportal.com (WA)
The Wilder Institute : www.permaculturenow.com (WA)
City Repair : www.cityrepair.org (OR)
Suburban Permaculture : www.suburbanpermaculture.org (OR)
Cascadia Permaculture Institute : www.cascadiapermaculture.com (OR)
Eugene Permaculture Guild : www.eugenepermacultureguild.org (OR)
Barrett Ecological : barretecological.com (OR)
Permaculture for Renters : permacultureforrenters.com (OR)
Evolutionary Pathways : evolutionarypathways.org (OR)

SUPPORTED BY BIOREGIONAL ECO-EDUCATION :

Sustainable Living Arts School : www.ediblelandscapes.ca/SLA_School.html
Rolling Earth Farm & Retreat : www.rollingearth.ca
Native Plant Society of British Columbia : www.npsbc.org
Iris Griffith Field Studies and Interpretative Center : www.lagoonociety.com
Wondertree Foundation for Natural Learning : www.wondertree.org
SelfDesign : www.selfdesign.org
Sea to Sky Outdoor School : www.seatosky.bc.ca
Environmental Youth Alliance : www.eya.ca
Evergreen : www.evergreen.ca
British Columbia Environmental Network : www.ecobc.org
Sierra Club of Canada, BC Chapter : www.sierraclub.ca/bc
WildED : www.wilded.org
Naturescape : www.hcft.ca/nature.htm
Stewardship Center for BC : www.stewardshipcentre.bc.ca
Gala University : www.galauniversity.org
Elfinhome : Learning and Growing with Plants



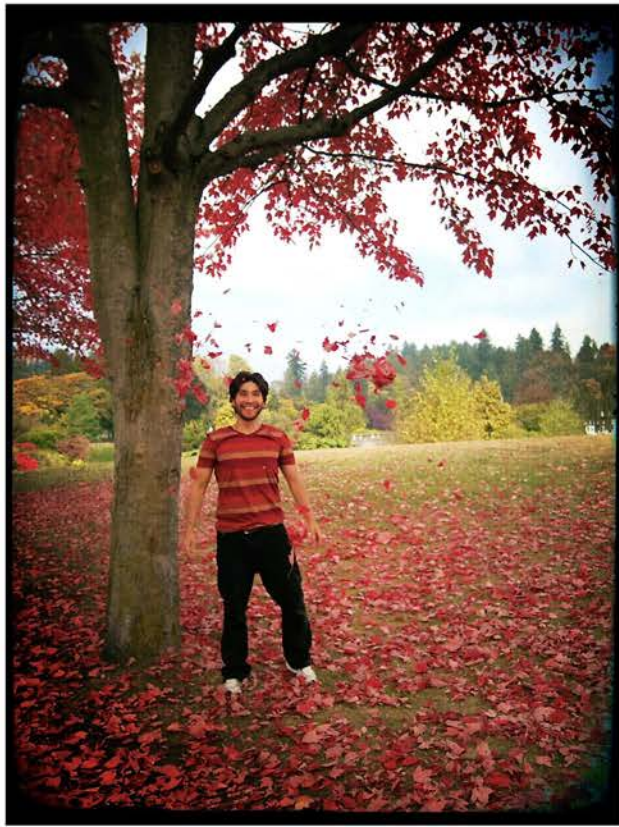
This process included a lot of networking, green mapping and community building to forge formal relationships.

Human Guild : Appreciation

Current Team

I am grateful for the team of locals who are part of the heart gardens stewardship team and learning guild.

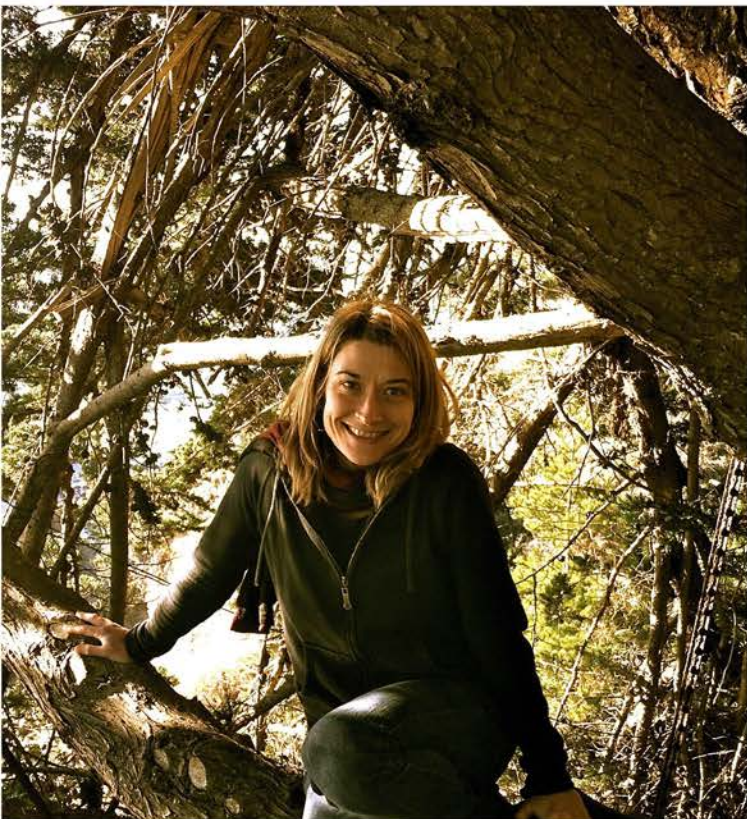
Deepest of gratitude goes to Vacio Cielo for his foundational work as a garden steward, helping with many aspects of the gardens and property including caring for everything while I am away. Super thanks goes to garden jedi Esco Goodwin has helped create most of the gardens, pathways and framing for parking. He comes in the winter to do fixes and installations of placemaking elements.





Endless gratitude for photography Dana Wilson and Shel Neufeld as well as key map and design work from Steve Christian.





Bows to Karen Mckenzie for foundational helps, Jefe Willital for countless key supports, Mac Avery for hardscaping

Reflection

What effects are your actions having?

The gardens are growing up and permaculture is becoming a household word in my tiny village and the bioregion around it. As soil is built and the plants and trees become established, a legacy garden is being set up that will live for generations beyond me.

The network is growing as I connect with more people through my free permaculture days and courses. Certainly the gardens is a vehicle for community building and bringing me into relationship to many different people in my bioregion.

I will add more reflections when I come back to this design later in the program.





History

The Elphinstone was originally occupied by the Coast Salish nations. The local Shishalh people referred to Roberts Creek as hwah-sam, meaning big, fat salmon. The mild climate and abundance of fresh water and natural food made this area a favourite site. The Heart Gardens honours, celebrates and learns from the 10 - 14,000 year culture of the land who tended the wild, tree harvesting, selectively burning favouring harvesting areas with food plants for people and forage for game. The rainforest provided a sophisticated set of tools, clothing and cultural objects, transport, buildings, fabrics, nets and hunting gear, glue, rope, cleaning products, dyes, fuel, and ritual incense. The forest pharmacopoeia included a very sophisticated plant medicine tradition which included chewing leaves or roots, making teas and using poultices.



Harvest

Design Principle

What is a principle that will anchor and remind me of the design?

The gardens are very much about relocalizing. On a personal level I have relocated my base income so it's coming from the area immediately around my home. With a health food store and farmers market just outside my door, I can take care of my basic needs within a 1 minute walk of my house. A beautiful forest and amazing beach is 3 minutes walk away with an ancient rainforest a 20 minute, 4 wheel drive away up the mountain. There are also a number of gardens and farms within close walking distance and bus distance where I can get food, services and access more diverse classrooms.

The gardens are also helping relocalize the community by offering support, education and genetic materials. They are encouraging people to grow more food locally and use functional native plants in the design of private and public spaces.



Integration Anchor Point

Looby Macnamara has been teaching me about this but I still have much to learn to really get it. She suggests to

- *select and glean from each anchor point*

- *identify core functions you want to fulfill and the ideas and inspiration for how to do it*

- *design systems to fulfill those needs*

The design for resilience of this long term legacy project is a touchstone. There are very few places with no corporate presence, no bank, gas station, chain store left in the world. Helping the community preserve its values and Official Community Plan can only be done successfully by helping relocate the economy so people can afford to live here and participate.

One of the core functions of the design is to create a safe, educational and edible downtown Heart of the Creek complex for my tiny village. I think continuing to see this as a Life Ship, something that can teach and sustain the community in the future is another touchstone for the design process.





Roses, Thorns, Buds

Roses

- right livelihood that cares for my rent and bills with a bit for food
- support from my awesome bosses to manage the work and development within the budget and hours
- doing meaningful work supporting the local human and ecological community

Thorns

- the property has been informally for sale for two years so I have had a long period of not feeling 100% stable with my home and job

Buds

- the new ownership team who comes into play may be inspired to invest in some key upgrades including red brick paths, front parking lot courtyard, more plant species, and a water tank for on-site water resiliency

Unlocks

I have found a great media opportunity to pair with long time friend and Heart Gardens team member Jefe Willitall to create some unique new media to promote the gardens and help them reach their educational goals.

Mingling sacred food-medicine flower ally plants with a history of use by the Coastal First Peoples from the Heart Gardens with sustainably harvested crystal friends from The Elfinstones Gemshop we explore the healing properties of sacred plants and crystals. The profoundly elvish Jefe Willitall playfully arranged and photographed these magical unions. The energy of the plants and crystals work together to form sacred guilds bringing more light into our world.





Golden Key

Looby Macnamara has described this touchstone in the design as :
Part of helps including certain resources that are really helpful in taking the design to next level. She notes that it's not about endless lists but some creative work to create an array of possibilities and zone in on the golden key.

This design could be used as a tool to help sell the property. This folio shares some images and inspirations about the property while giving a feel for the type of community that lives here. This design could go alongside a folio with more information about the buildings and businesses including the financial details of leases, rent income, annual costs and other relevant info.

Perhaps this design could also be part of a package to apply for grants to get plants and signage.

Golden Pattern

Looby Macnamara advises us to *take the design to the level of reflective competence. See your journey and how it can help someone else on their journey*

I got my start in permaculture creating learning gardens at elementary schools and on public property on the Sunshine Coast and this has remained a core interest of mine. Visiting other sites and interviewing teachers who also focus on learning gardens will be a feature assignment for the coming year.

My vision is to work with the team to interview Mark Lakeman (Placemaking), Michael Becker (School Gardens), Starhawk (Learning Gardens), Pandora (Prison Gardens) and someone else in Portland for City Repair.



Reflection Principle

How were the principles used?

The permaculture principles are drivers for this design on many levels.

My work beyond building the gardens has been to **map** it extensively in order to understand the design constraints and possibilities and help with plant and element placement. The invisible map is also of appropriate plant species for these micro-climates. I am also mapping the community and what they would appreciate and relate to for the site design. The site **protects** the genetic diversity of key plants of significance to the first peoples by providing genetic material and encouraging people of use these plants in their own sites. The influence of the gardens is **extending**. The land grant from the regional district government and a recent purchase of a small slice of property next year the physical site is also extending.



Design Evaluation

So far things are going well. Many designs have been applied, creating pathways and parking, element installations and expanding from 5 gardens to 32 gardens. Many more people have been integrated into the project and educational goals have had good initial success.

It will also be interesting to check back on this design evaluation later in the process.





Assessment

The design does include a key summary along with survey information, base maps and overlays. I have taken some time to analyze the information, apply design methods, ethics and principles and go through a process of installation and maintenance. Its been interesting to apply some more creative strategies from Social Permaculture to a land based design. This has been profoundly helpful and seeing things more holistically and coming up with ideas and insights that could play a meaningful part of the future of the Heart Gardens.

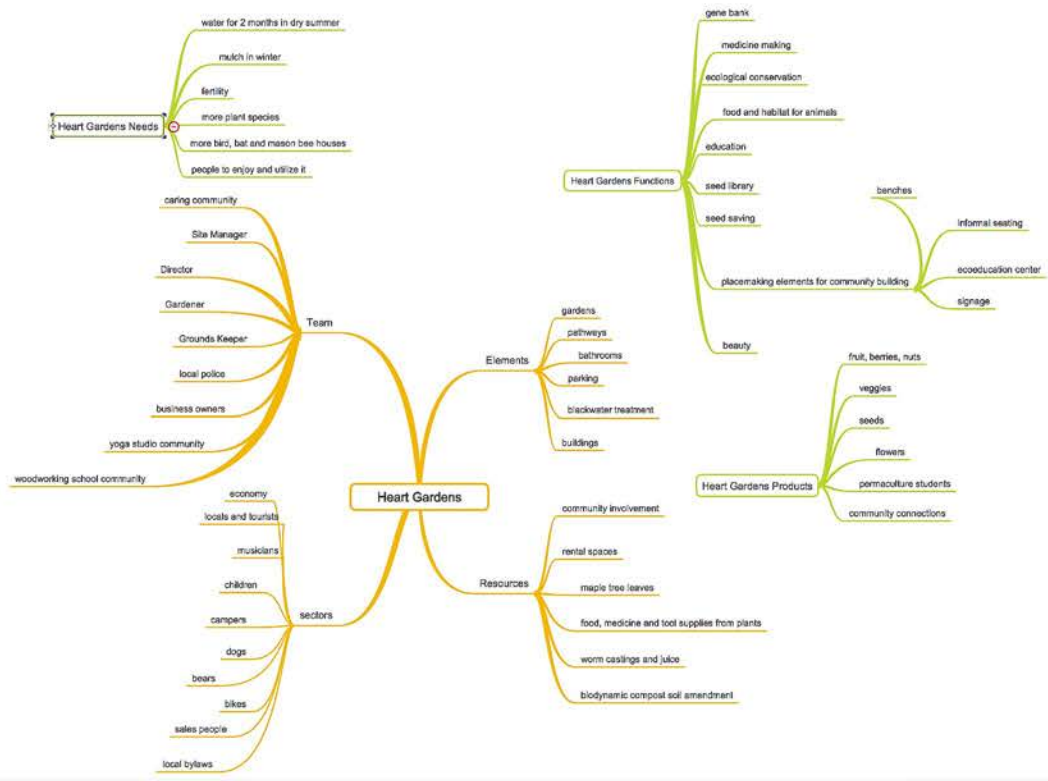
Future

The future remains unwritten. I would so love to continue to steward the gardens and live in my cozy apartment for my life. One day I could rent the space next to mine to expand my living space by 50%, creating a classroom to host students that is entirely separate from my core living space including bedroom, office, kitchen and and bathroom. I could expand the plant collection of the gardens and streamline the maintenance as things get established. There is only so much space and once the garden community has been put in, future investment won't be needed. Likewise, once more development is done on pathways and parking lots, the property will be all done and development money won't be needed. The gardens and site will just require maintenance but no more development. In the future I also see a site manager and fix-it person who takes care of light bulbs, gutters, rent collection and other simple tasks currently done by the land owner. I also vision sharing more of the garden work with Vacio Cielo as a core team member, to support him and give me more freedom to travel and do outreach.



Visual Design

This was another experiment in learning how to make visual designs using a mind map program. I went a little deeper into branches and categories. Now I have figured out the very basics of MindMapleLight and its time to purchase an edition that allows pictures and more dynamic organizing frameworks so I can take this process to the next level.



Outro

This is a creative pattern for doing a land based site map and design includes ethics, principles, design methods, zones and sectors with attention to soil, plants and trees, animals, water and climate.

My hope is that others may benefit from this pattern and apply it to bring creativity to the holistic map and design of their own sites.

May this work be dedicated to the benefit of everything in our precious and sacred world.





Credits

Visionary Permaculture Photography

Epic Level Gratitude to the Visionary Dana for the outstanding photographs

Dana Wilson www.gaiacraft.com/gaias-guild/
Site woodwork, Farmers Market, Knit Balm, Elfinhome, Plant Community, Zones, AEIOU, Ethics, Pause, Roberts Creek Pathways Project, Harvest, Integration Anchor Point

Awesome thanks to **Robin Hume Photography** for Frog's Eye View Photos

Site features, Harvests, Dogs and Deer (page 40), Roses Thorns and Buds,

Wide eyed gratitude to Shel for the ultra high level photos

Shel Neufeld www.shelneufeld.com

Essence, Sparrows and Sapsuckers (page 41), Pollenate, Anchor Points, Vision, Limits, Helps, Patterns, Action, Momentum, Integration, Design Evaluation, Assessment, Outro, Credits

Deepest thanks to Poxin for the epic level photos still shining brightly.

Josef Schmidt www.poxin.org

Climate, Pretro, Intro, Needs and Functions, SWOC, Observation Principle, Ideas, Needs Development, Personal Sustainability, Reflection, History

Kind gratitude for the professional upgrades

Kent Kallberg www.kentkallberg.com

Journey from Vancouver, Looking Back, Newly Landed

Epic thanks to Geoff Lawton for sending Ryan Hill to get some drone shots of the gardens

Ryan Hill

Nestled, At the Base, Top Down (pages 10-12)

Bows to **Normal Leville** for the historic photo of Robin Wheeler and Vacio Cielo.

A shimmer of gratitude to visionary Tyler for the ice art installation and pics

Tyler Gentry

Credits

Divine thanks to angel visionary Gabriel for the numinous photos of the Heart Gardens Succession of Splendour (pages 30-31)

Gabriel Lightheart www.heartnation.org

Gratitude to Imasel whose light uplifts

Imasel Moreno

Elvish blessings to Jefe for the magical support with flower and crystal photos

Jefe Willitali www.elfinstones.com

Unlocks, Golden Key, Golden Pattern

Visionary Permaculture Art and Design

Kind gratitude to Unity Life Avatar for the art and design on all the Permaculture Principles Cards, Heart Maps and other media.

Unity Life Avatar www.unitylifeavatar.ca

www.permacultureprincipleseducation.ca

Elfinhome poster, Heart Cards, Heart Gardens Micro-Sectors, Embrace Weeds, Find the Others, Worksheets in the Educational Goals, Heart Gardens Permaculture Maps, Relocalize, Map Protect and Extend, Future

Ever thanks to the exceptional Mark Lee for the awesome map and hoppy leaf jumper mascot

Mark Lee www.somnio8.com

Cover, Inner Cover, Ideas

I am so grateful to Steve Christian who has led much of the design of the buildings, pathways and flow of the property. His insight has been a driver for this process and his skills can be seen in the AutoCAD maps throughout this report.

Steve Christian Second Nature Designs

Awesome thanks to Xavi and Phong for the Gaiacraft and Dew Logo

Xavi www.xavidesigns.com and **Phong**

www.phong.com

Deepest bows to master designer Sijay a touchstone in my world for the Heart Gardens Society design

Sijay James www.onbeyondmetamedia.com

