HOOP HOUSE REIMAGINED

Hoop house reimagined design by Lumia Huhdanpää-Jais

Lumia Huhdanpää-Jais

DATA

Design name: Hoop house reimagined
Lumia Huhdanpää-Jais' Diploma Portfolio Design 10/10.
Diploma journey started in 4/22.

Summary
This project gives new life to an old hoop house frame that's been sitting unused for two years after its plastic cover wore out. The aim is simply to find good use for the unused hoop house frame. Rather than buying a new cover, I'm reimagining the frame's purpose creatively. The design starts without a fixed outcome, using the design framework to guide the process. The end result is a multipurpose space in an so far rather unused area of our premises.

Design Framework used: OBRIEDIM (observe, boundaries, resources, ideas, evaluate, design, implement, maintain)
Client: Residents of Beyond Buckthorns: myself and husband Dominik
Dates: 06/2024-10/24 onwards
Tools Used: Zones, Sectors, ChatGPT, PMI, PASE, SWOC, Photos & Maps, Ian McHarg's Exclusion

ETHICS AND PRINCIPLES GUIDING THE DESIGN

Ethics:
- **Earth care:** The design should prioritize using existing materials and perhaps include elements to support biodiversity and soil health.
- **People care:** The design and the implementation shouldn't be too taxing or time consuming. Create a space to support our bigger goals of education and demonstrating design.
- **Fair share:** Maximize the use of available resources and share the benefits of the project with others.

Principles:
- **Observe & interact:** Begin by understanding the potential and limitations of the unused frame and surrounding environment before making decisions.
- **Produce no waste:** Focus on making the best use of existing resources to minimize waste and reduce the need for external inputs.
- **Small & slow solutions**: Keep whatever solution small and manageable.
- **Creatively use & respond to change:** Embrace the project's evolving nature, adapting as new opportunities or challenges arise.

INTRODUCTION

We bought a hoop house/ little greenhouse several years ago in a end-of-season sale for 20 €. It came with a frame and a plastic cover. In a few years time, the plastic deteriorated and started falling apart. We discarded the plastic, and tried to get new one, but didn't find anything suitable for a decent price. We tried different solutions like other kinds of plastic covers, none of which were very durable in use.

The last two years the frame has been sitting unused, and it's time to change that.

This design starts from a point of not knowing what the end result will be. I don't have a vision for it, nor and idea what could be the best solution. I only would like that the frame stays in use onsite at Beyond Buckthorns. Otherwise, I will let permaculture guide me and see where we end up.

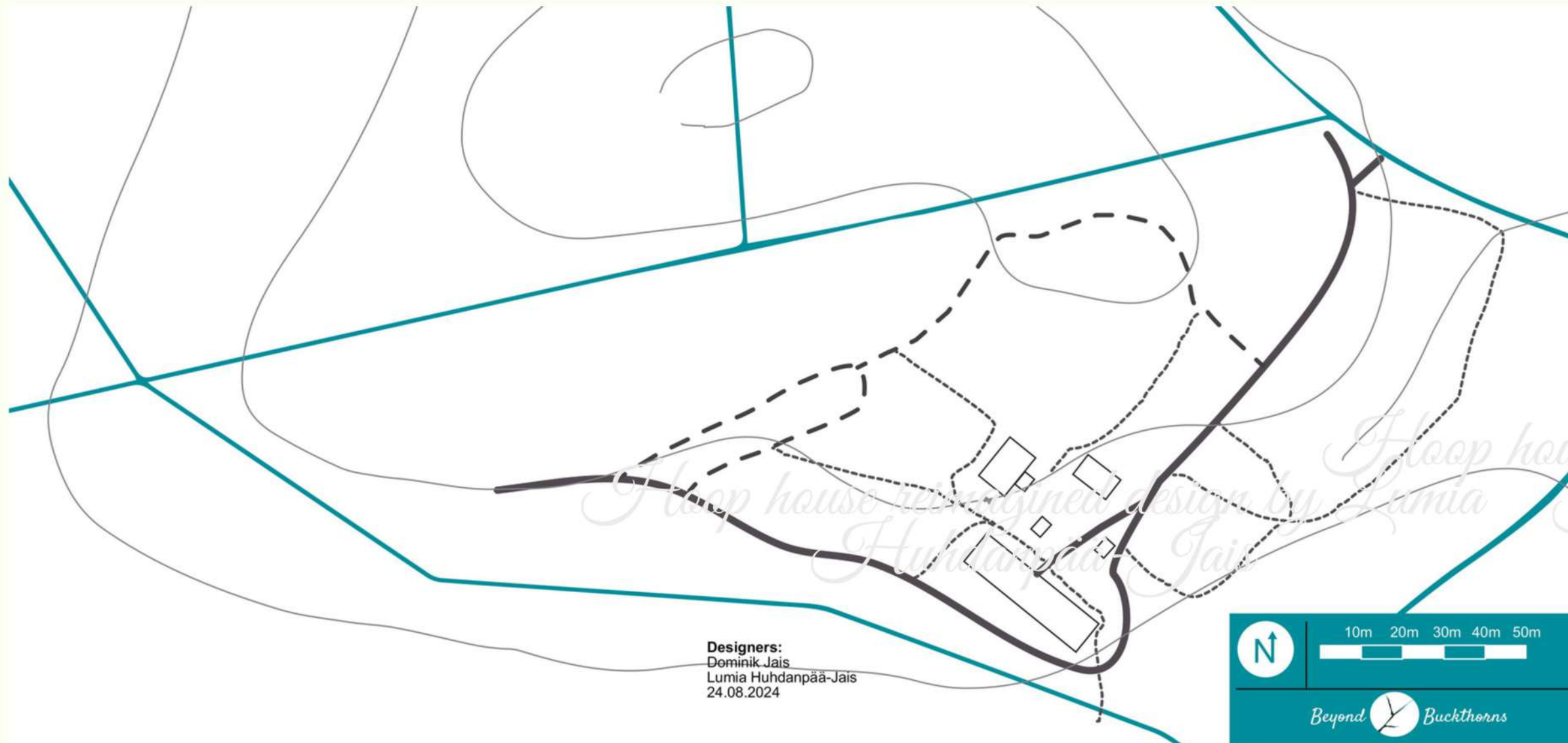Hoop house reimagined design by Lumia Huhdanpää– Jais

OBSERVE

FACTS ABOUT THE FRAME

- The frame is 2x6 m big and about 2 metres high at its highest part.
- It's aluminum, so light but not so sturdy.
- It's currently located behind our house, but can be easily moved by two, three people.
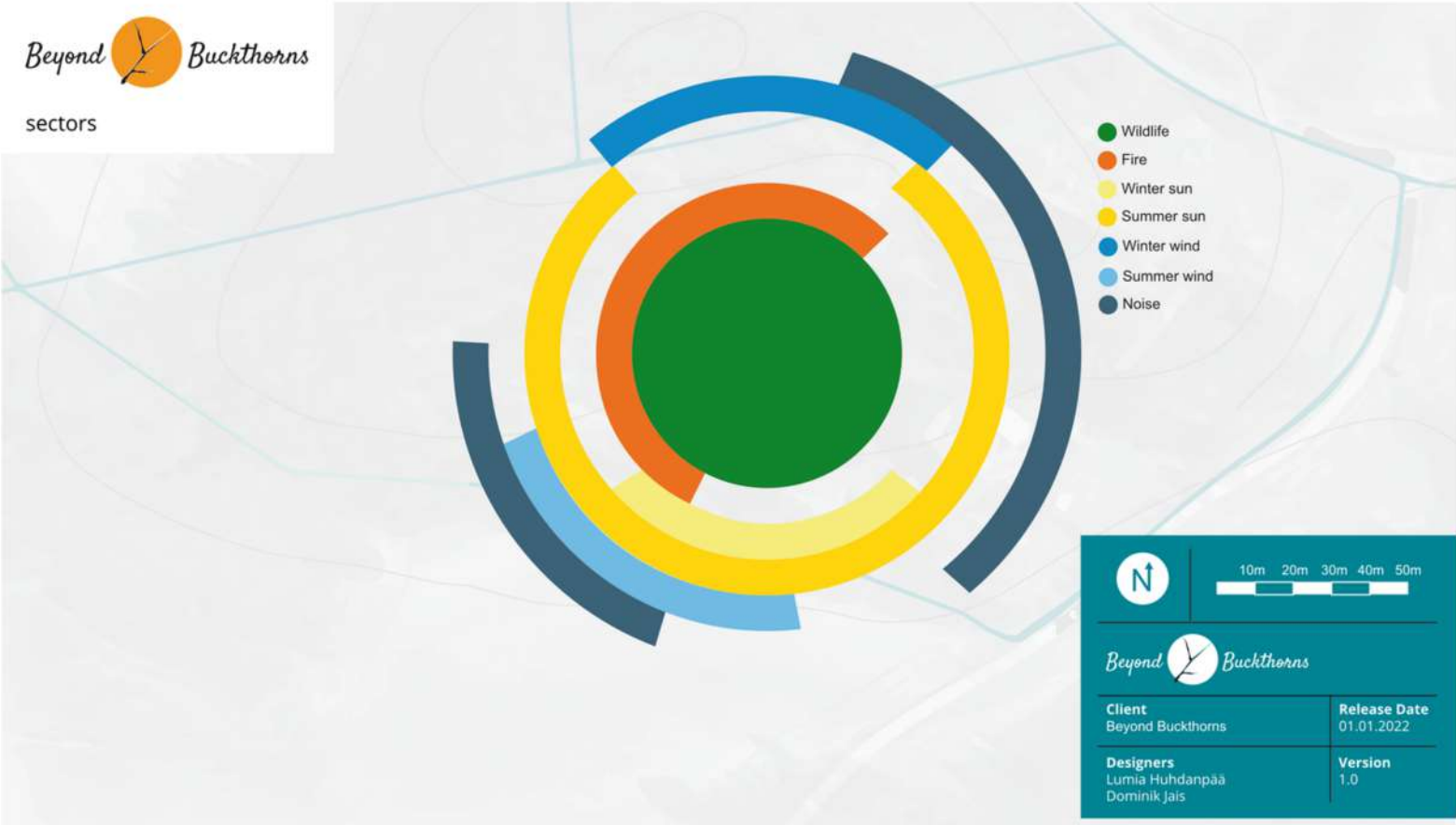
MAP OF BEYOND BUCKTHORNS

Map 1: Map of Beyond Buckthorns including borders, contour lines, buildings, roads and pathways.

Designers:
Dominik Jais
Lumia Huhdanpää-Jais
24.08.2024

10m 20m 30m 40m 50m

Beyond Buckthorns

ZONES AND SECTORS ONSITE BEYOND BUCKTHORNS

Map 2: Sectors at Beyond Buckthorns

Map 3: Zones at Beyond Buckthorns

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Image 1: Hoop house at its current location

Image 2: Location of the hoop house at Beyond Buckthorns marked with blue dot

BOUNDARIES & RESOURCES

BOUNDARIES & RESOURCES

Boundaries
- the frame should stay onsite, so no plans of selling or discarding it
- low budget
- not too much time and energy to use for the project – small and simple solutions preferred
- see also Ethics and Principles to guide the design on Page 1 to get a feeling of the general idea I'm after.
- otherwise very little boundaries at this point regarding placement, use etc.

Resources
- the hoop house frame!
- all kinds of other materials onsite
- some time and energy to use for the project
- little bit of budget
- see also Ethics and Principles to guide the design on Page 1 to get a feeling of the general idea I'm after.

IDEAS

IDEAS

To come up with wild ideas I turned to the AI tool called Chat GPT. I prompted it to come up with all kinds of creative uses for the frame to help get my creative juices running.

See everything we came up with in <u>Appendix 1</u>.

Image 3: Excerpt of the idea list

- Composting Station: Turn it into a sheltered area for compost bins and worm farms.
- Biodome: Create a self-sustaining ecosystem with various plants, small animals, and insects.
- Fairy Garden/Fairy Tale Garden: Design a whimsical garden space with miniature plants and decorations.
- Butterfly House/Release Space: Transform it into a butterfly habitat with nectar plants and larval host plants.
- Mushroom Cultivation: Set up a controlled environment for growing gourmet mushrooms.
- Herb Drying and Processing Room: Use the space for drying and processing herbs and medicinal plants.
- Outdoor Library/Reading Nook: Create a community book exchange or reading nook with portable furniture.
- Workshop: Use it as a sheltered workshop space for carpentry, metalworking, or other crafts.
- Bird Aviary: Create an aviary for keeping and observing birds in a naturalistic setting.
- Vertical Garden/Hanging Planter Display: Install shelves or vertical planters to create a compact, highly productive vertical garden.
- Mini Vineyard/Grape Arbor: Grow a few rows of grapevines inside for a personal wine-making project.
- Hydroponics System: Set up a hydroponics system to grow vegetables and herbs without soil.
- Seed Starting Station/Temporary Plant Nursery: Use the space to start seedlings for

EVALUATE

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EVALUATE / IDEAS

I went through the ideas and first removed all ideas that we have other solutions for (garden shed, chicken coop...), as well as all ideas that require taking up new hobbies (apiary, doll house display...)

The rest go to a PMI.

Table 1: PMI of all viable ideas

Idea	Plus	Minus	Interesting
Greenhouse café	-Unique experience -Movable shop structure	-Requires setup and maintenance and covering/roof -Needs lot of work -The frame is not really suitable for this	-Something we've been planning actually
Outdoor library/reading nook	- Can be a community space - Encourages reading and relaxation - Way to move these activities outside	- Books need good protection from the elements - Need furniture	
Vertical garden/hanging planter garden	- Maximizes space - Lovely eyecatcher	- Needs regular watering and maintenance	
Mini vineyard/grape trellis	- Growing wine grapes would add to our biodiversity and food production - Grapevines can create a natural protection and roof for the structure	- Takes time to establish - Plants need tending and perhaps winter covering	- We have a good supplier for plants locally
Yoga and meditation space	- Peaceful relaxation space outdoors, we don't have that yet	- Limited use, fits one or two people most - Likely needs a roof	- How to beautify the frame?
Garden archway	- Decorative entrance to the annual garden or forest garden is an eyecatcher - Adds to biodiversity	- Perhaps limited functionality - Limited spaces around the entrances to these areas	
Bird feeder station	- Attracts and supports birds - To be used in winter	- Needs regular refilling - We have these elsewhere	- Great for more birdwatching!
Lighting display/fairy light installation	- Creates magical evening ambiance - Element that we don't have yet	- Needs electrical setup or battery lights, or candles in autumn - We don't get many guests in the dark season	- Surely pretty, but does it align with permaculture?
Bean trellis/plant trellis	- Supports climbing plants like rose beans and different tomatoes, cucumbers...	- The frame is very big compared to my annual garden bed sizes – will it fit there?	
Garden sculpture gallery/art installation	- Displays outdoor art - Can be a community project - I personally love these kinds of outdoor art spaces!	- Needs regular updates and work - Art needs to be weatherproof or be designed to deteriorate with the weather	- Might attract new visitors to Beyond Buckthorns
Wind chime garden	- Adds a lovely auditory element to the site	- Needs installation - Needs chimes	
Photo booth frame	- Fun photo opportunities	- Needs seasonal decoration - Do we need this, what's the use? - Surely fun, but does it align with permaculture?	- Great for events

EVALUATE / IDEAS

Next, a PASE tool was used to evaluate if the ideas are realistic and what is needed.

Idea	Physical	Activities	Social	Economic
Greenhouse café	Requires selling space, perhaps seating, tables, decorations. Toilet facilities need to be nearby.	Hosting events, serving food and drinks, selling products.	Attracts visitors, creates a social gathering spot.	Revenue from sales, costs of setup and maintenance.
Outdoor library/reading nook	Needs bookshelves, seating, weatherproof storage.	Reading, writing, even small group discussions.	Provides a calming space for self-care and education.	Initial cost of materials can be high.
Vertical garden/hanging planter garden	Needs shelves or supports for hanging planters, irrigation system.	Growing plants, vertical farming, improving aesthetics.	Enhances our growing spaces, provides fresh produce, educational tool.	Initial setup cost depends. Low maintenance cost.
Mini vineyard/grape trellis	Requires trellis setup, good soil, and irrigation.	Growing grapes, preserve-making, even wine.	Community engagement through events like harvest. Educational tool.	Initial setup cost (can be divided to several years)
Yoga and meditation space	Needs yoga mats and place to store them, a roof perhaps and some calming elements like plants.	Meditation, relaxation, yoga.	Provides a peaceful retreat, encourages mindfulness practices.	Low cost to set up, potential for making our courses more varied/interesting.
Garden archway	Needs climbing plants and work.	Creating a garden entrance, supporting climbing plants.	Enhances garden aesthetics, creates a welcoming entrance.	Low maintenance cost, initial setup cost for plants and materials.
Bird feeder station	Requires bird feeders, seed storage can be indoors.	Feeding and observing birds, educational activities.	Supports local wildlife, enourages birdwatching.	Low initial setup cost (can build feeders ourselves).
Lighting display/fairy light installation.	Needs outdoor lights, perhaps electrical setup, weatherproof decorations.	Nighttime garden tours, events.	Creates a magical ambiance, attracts visitors.	Initial setup cost for lights. Can improve the interest to BB.
Bean trellis/plant trellis.	Needs sturdy supports for climbing plants, good soil.	Growing beans or other climbing plants, educational gardening.	Provides fresh produce, educational tool for gardening.	Low cost, potential to sell produce, enhances garden productivity.
Garden sculpture gallery/art installation.	Needs sculptures or art pieces, secure mounting, lighting for display.	Art exhibitions, garden tours.	Enhances cultural and aesthetic value of the garden, attracts visitors.	Initial cost for art pieces, potential revenue from ticket sales and art sales.
Wind chime garden	Requires wind chimes, sturdy supports for hanging, possibly seating.	Creating a soothing sound environment for relaxation.	Enhances garden ambiance, provides a unique sensory experience.	Low setup cost, low maintenance.
Photo booth frame	Needs themed decorations, perhaps even camera setup, lighting.	Photography, themed events, social media engagement.	Attracts visitors, provides a fun and interactive experience.	Very high setup cost.

Table 2: a PASE sheet of all viable ideas

EVALUATE / IDEAS

Looking at the permanence of these ideas:

Idea	Permanent/Non-permanent (movable)
Greenhouse café	Movable
Outdoor library/reading nook	Movable
Vertical garden/hanging planter garden	Movable
Mini vineyard/grape trellis	Permanent
Yoga and meditation space	Movable
Garden archway	Permanent OR movable depending on plants
Bird feeder station	Movable
Lighting display/fairy light installation	Permanent for one season at a time (if connected to electricity)
Bean trellis/plant trellis	Permanent for one season at a time
Garden sculpture gallery/art installation	Movable
Wind chime garden	Movable
Photo booth frame	Movable

Table 3: permanence of the ideas

EVALUATE /COMBINATIONS

After this evaluation, none of these ideas seem great enough on their own. I asked ChatGPT to come up with different combinations on the ideas.

See what we came up with in <u>Appendix 2</u>.

From that list, my favorite idea at this stage is the **Mini vineyard/grape trellis with meditation space and bird feeder station**. I did a PMI on that:

Plus	Minus	Interesting
Adds beauty and charm to the area.	Birds may drop seeds or damage the plants.	Multi-purpose space: Combines gardening, wellness, and wildlife support.
Adds a productive element (grapes) and increases biodiversity (grapevines, birds).	Bird droppings might affect the meditation space.	Blends meditation and yoga with nature
Provides a relaxing area for mindfulness and wellness.	Birds might eat the grapes.	Can be used in teaching as a design example; can be used by course participants to relax
Encourages birdwatching and supports local wildlife.	Depending on location, bird feeder might be difficult to reach during high snow	

Table 4: PMI on favorite combo idea

EVALUATE /COMBINATIONS

All minuses in the PMI are bird-related. The last Minus is the make-or-break. We feed birds only in the wintertime. The structure would need to be very close to the house or pathways to make it viable to fill the feeders daily during high snow – which is most winter months. It's too much work! The idea will need to change. I replaced the bird feeding with wind chimes and came up with this:

Plus	Minus	Interesting
Wind chimes won't disturb the vineyard like birds might.	Wind chime noise: Might not be suitable for everyone, especially in windy areas.	Combines visual, auditory, and tactile elements.
Adds a productive element (grapes) and increases biodiversity (grapevines, birds).		Opportunity to use handmade or upcycled chimes.
Provides a relaxing area for mindfulness and wellness.		Wind chime workshops?
Wind chimes add an artistic and relaxing experience.		Wind chimes often have meanings related to harmony and peace.
Creates a space we don't have onsite yet.		

Table 5: PMI on revised idea with wind chimes

EVALUATE /COMBINATIONS

I like the idea. Let's
do a SWOC
Analysis on it:

Image 3: SWOC of the Mini winegards/meditation
and yoga space/wind chime display idea

Strengths
- Utilizes the existing hoop house frame creatively
- Creates a unique, tranquil space for mindfulness and
relaxation, which is not currently available on-site.
- Supports biodiversity with grapevines and perhaps
some additional plants, while avoiding bird-related
issues for the vineyard.
- Multi-sensory environment combining visual,
auditory, and tactile elements.
- Potential for community engagement and workshops
(e.g., wind chime-making or grapevine care).

Weaknesses
- Wind chimes might not be suitable in very windy
conditions due to excessive noise.
- Lack of protective cover
- Regular maintenance is needed to keep the space,
plants, and structures in good condition.

Challenges
- Grapevines and wind chimes are vulnerable to harsh
weather (wind, snow, heavy rain).
- Wind chime noise might disturb the peaceful
atmosphere in very windy conditions.
- Balancing different functions: Ensuring the
meditation space, vineyard, and wind chimes work
harmoniously.
- Location is yet unclear

Opportunities
- Host creative or educational workshops (wind chime-
making, etc.).
- Promote community involvement and collaboration
- Use of upcycled and handmade elements for the
design, promoting sustainability.
- Experiment with the open-ended nature of the
design to adapt and evolve over time.

EVALUATE / COMBINATIONS

Evaluating through the principles' lense:

1. Observe & interact
- I need to pay attention to the sectors: how sunlight, shade, and wind patterns move through the hoop house frame area throughout the day and year. Grapevines thrive in full sun.
- I must observe how people – us and our guests - move and interact within the area.
- Make sure people using the space do so without disturbing the grapevines.

2. Use edges & value margins
- Use the edges of the frame for the wind chimes and to grow grapevines vertically, increasing yield without occupying too much horizontal space. This enables the space for the meditation area in the middle/on the ground.

3. Integrate rather than segregate
- I can use the grapevines not just for food production, but also for creating shaded areas over the meditation space. This integrates food production with comfort and usability of the space.
- Using the hoop house frame itself for multiple purposes: support grapevines and hold wind chimes.
- I need to ensure that the wind chime garden and meditation area don't conflict with each other. I can do this by using lightweight chimes that produce softer sounds to maintain the peaceful atmosphere of the meditation space
- Add some other plants, perhaps flowers and herbs in pots on the ground on the edges to create a calming, biodiverse atmosphere.

4. Produce no waste
- The idea has no need for any new materials to be bought or produced - everything is at hand, can be up-cycled from existing materials or found from the second hand market.

Hoop house reimagined design by Lumia Huhdanpää- Tais

DECISION

I choose the idea of the combined mini wineyard / meditation and yoga space / wind chime garden!

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EVALUATE / LOCATION

As the idea of "what" is now clear, we can move to the "where": evaluating location choices.

Photos

I took a walk throughout our premises, photographing all remotely possible areas where the structure could stand. Here are a few examples. See all the photos on the <u>Drive</u>.

Images 4, 5, 6: South edge, House side, Crossing left

EVALUATE / LOCATION

The next step is to analyze location possibilities with Ian McHarg's exclusion Method.

Key criteria for exclusion
- Sunlight: grapevines require full sun, so shaded areas like under trees or behind structures should be excluded.
- Wind exposure: we do not have exessive winds anywhere, so is is not that important here. I need to choose an area with some wind for the chimes. Hence, I'll need to exclude areas completely blocked from wind by walls or thick vegetation.
- Wet soil: sreas prone to waterlogging or poor drainage should be excluded, as they are not ideal for grapes or comfortable meditation spaces.
- Slope: slopes are not suitable for the meditation and yoga activities
- Existing vegetation and wildlife: Exclude zones near special trees, bushes, and known wildlife activity areas.
- Exclude areas very close to the house, especially windows and doors to reduce noise.
- Exclude areas that are far from paths or difficult to reach, like in the forest.

The potential site needs to meet all the necessary criteria:
- Full sunlight exposure.
- Some wind presence for chimes.
- Dry soil and good drainage.
- Flat or only gently sloping terrain.
- No disruption to important vegetation or wildlife.
- Located at a comfortable distance from the house.
- Easily accessible but not too remote.

And of course the structure needs to fit into the area physically, so the space can't be too small.

EVALUATE / LOCATION
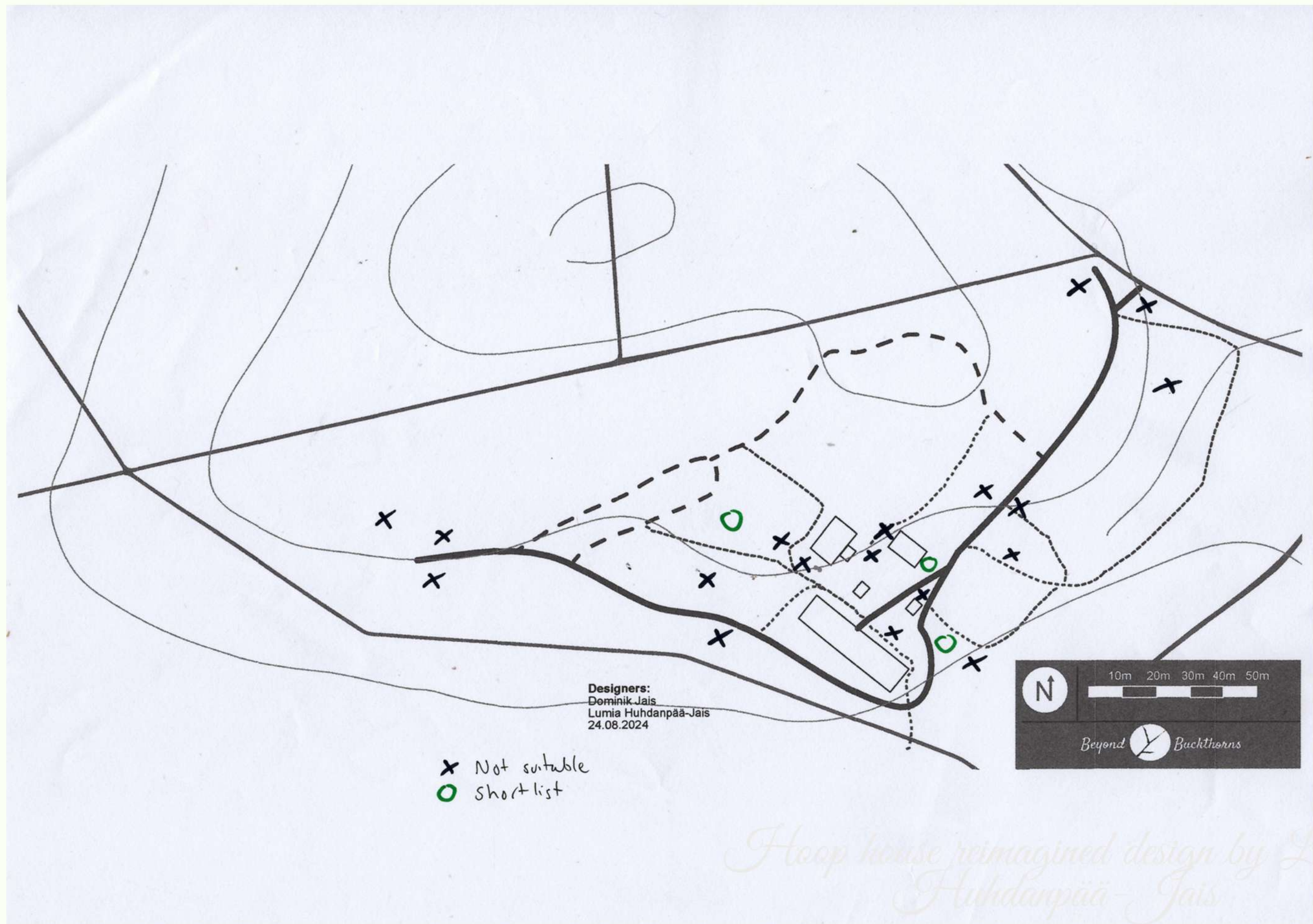
McHarg's exclusion on the photographed sites:

Table 6: McHarg's exclusion tool used on the possible areas

Area	Sunlight	Wind exposure	Wet soil	Slope	Existing vegetation and wildlife	Proximity to the house	Accessibility	Other
Biogashed-north	Low	Good	Yes	No	No	Too close (Z1)	Good	
Biogashed-south	High	Good	No	No	No	Close (Z2)	Good	Takes away parking/camping spot
Next to annual garden	High	Good	No	Partly	Partly	Close (Z2)	Moderate	
Below annual garden	Moderate	Good	Yes	Yes	No	Still close (Z2/3)	Moderate/bad	
Crossing-left	Moderate	High	No	No	Yes	Far (Z3)	Good	Needs tree felling
Crossing-right	High	High	No	Yes	Yes	Far (Z3)	Good	
Forestgarden-front	Moderate	Good	Yes	No	Yes	Too close (Z2, but close to windows)	Good	
Forestgarden-in	Moderate	Low	No	No	Yes	Still close (Z2/3)	Good	
Frontyard-low	High	Good	No	No	No	Still close (Z2/3)	Good	Blocks a pathway
Frontyard-top	Moderate	Good	No	Yes	Yes	Too close (Z1)	Good	
Hilltop-left	Low	Good	No	No	No	Far (Z3)	Good	Blocks a tractor pathway
Hilltop-right	Low	Good	No	Yes	No	Far (Z3)	Good	
House-side	Moderate	Good	No	Yes	Yes	Too close (Z1)	Good	
Korpis-container	Moderate	Good	No	No	No	Far (Z3/4)	Moderate	Takes camping/tractor space
Korpis-north	Moderate	Good	Yes	No	No	Far (Z3/4)	Moderate	
Korpis-south	Moderate	Good	No	No	No	Far (Z3/4)	Moderate	
Navetta-front	High	Good	No	No	No	Close (Z2)	Good	Currently in other use
Orchard	Moderate	High	No	Yes	Yes	Far (Z3)	Good	
South-edge	High	Good	No	Yes	No	Close (Z2)	Good	
Spruce-under	Low	Moderate	No	No	No	Still close (Z2/3)	Good	
Walipini-front	Moderate	Moderate	No	No	No	Still close (Z2/3)	Moderate	Needs tree felling, will block walipini

Hoop house reimagined, design by Ronja Huhdanpää – Jais

Designers:
Dominik Jais
Lumia Huhdanpää-Jais
24.08.2024

N ↑ 10m 20m 30m 40m 50m

Beyond Buckthorns

✗ Not suitable
○ Short list

Map 4: Possible locations on the Beyond Buckthorns basemap

EVALUATE / LOCATION

Based on the Exclusion, possible areas for the project are:
- Biogasshed south
- Next to annual garden
- In the forest garden

EVALUATE / LOCATION

I did a PMI on the three possible locations to further help me with decision making.

Area	Plus	Minus	Interesting
Biogassed south	- High sunlight availability - Good wind exposure for wind chimes - No wet soil issues - Very accessible and suitable closeness	- Takes away potential parking or camping space - Close to the driveway – perhaps too close	
Next to annual garden	- High sunlight - Good wind exposure - No wet soil issues - Suitable closeness	- Partly sloped, needs good placements - Needs better pathway - Needs some distance to the adjacent compost due to possible smells	- Might utilize a currently underused area. - Can enhance soil quality with compost if needed
In the forest garden	- Moderate sunlight - Good soil conditions - Privacy from other areas - Enhances the interest in this area	- Limited sunlight exposure - Changes existing forest garden design	- Could create a secluded meditation spot within nature - Opportunity to integrate with existing forest garden elements - plans are to fell some more trees to enhance sunlight exposure anyway

Table 7: PMI of the three possible locations

DECISION

I choose the location Next to the annual garden!

EVALUATE / LOCATION

The area "Next to annual garden appears" is the most suitable option based on my evaluation

1. The site offers sufficient sunlight and wind exposure.
2. No waterlogging problems.
3. The site is at a good distance to the house and pathways—neither too close nor too far—making it accessible for maintenance while providing some privacy and separation from high-traffic areas.
4. With some enhancements, like better pathways and careful placements, this area can be better utilized than it is now. The existing compost can also be an advantage for soil improvement.
5. This area doesn't drastically change or interfere with other existing uses.

DESIGN

FINAL DECISION

Mini-vineyard combined with a meditation and yoga space with some potted plants and wind chime garden, which will be placed in the area next to the annual garden.

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DESIGN / SKETCH OF PROJECT WHEN FINISHED

Image 7: Conseptual sketch of the hoop house vineyard / wind chime garden / yoga and meditation space. The location is not correct; the sketch is made at the hoop house's current location. Sketch is made using Canva elements.

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DESIGN / PLACEMENT OF PROJECT ONSITE

Map 5: Placement of project marked on the BB Zones map with RED dot

Image 8: Placement of project marked on the aereal image of BB with BLUE dot

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Huhdanpää–Jais

DESIGN / PRACTICALS & NUMBERS

Next step is to plan how to make the idea come to life in practice. **Let's look at the practicals, gather some ideas and crunch some numbers:**

- The final placement of the frame needs to be precise, taking into consideration the distance to the compost and some trees and rare grasses that grow in that area. That will need to happen onsite when prepping the site and moving the frame to its place, as it needs careful observation of the elements
- Vines: their recommended planting distance 100 cm, so there is space for 14 plants maximum, if placed on the sides of the frame. I also must calculate room for the chimes, so I estimate a maximum of 10 plants are practical for the final design. I'll need to make sure to get different cultivars for maximum biodiversity and taste experiences! I will ask Helena, my local grapevine expert for help for deciding.
- Wind chimes: I'll start with at least four different chimes, more if I can find more during the winter (but no more than 6 to not make it too much. If I aquire more, I can switch them around during the season).
- Potted plants: get two bigger pots. I have the pots at home; I can get lovely summer flowers from the local nursery or repot some perennial herbs I have at Beyond Buckthorns. One of each could be a good combination.
- Box and a yoga mat: I have a suitable plastic box and a yoga mat at home that I can use.

IMPLEMENT

IMPLEMENT

As it's almost winter when working on this design, the implementation will need to happen next year. For that I've made an implementation calendar:

Month/Date	Task	Description
Winter 2024-2025	Find/make wind chimes	Ask around for wind chimes and see if I can make some from recycled materials.
May 2025	Site preparation	Clear and clean the area from any debris or unwanted plants, level ground if needed
May 2025	Frame moving	Set up the old hoop house frame and ensure it is structurally sound for the planned use.
June 2025	Planting grapevines	Buy and plant first selected grapevines in areas with optimal sunlight.
June 2025	Wind chime installation	Install wind chimes at various points on the frame
June 2025	Meditation/yoga space setup	Get a waterproof box for yoga mat. Get the potted plants and place them in the area.
Summer 2025	Observe desire lines	Observe the desire lines for pathways to the structure. Cut grass to create path accordingly.
Summer 2025	Wind chime workshop	If possible, have a little workshop to create wind chimes from recycled materials
September 2025	Winter preparation	Prepare the site for winter - cover vines on the ground if needed - remove wind chimes - bring in yoga mats, boxes - empty potted plants and/or bring them to winter storage
May 2026	Pathway review	Observe the situation and build proper pathway to the site if needed.
June 2026	Get more grapes	If budget didn't allow getting all the grapes in 2025 or any have died, get new ones now.
Ongoing	Maintenance	Please see maintenance calendar

Table 8: Implementation calendar for the project

MAINTAIN

MAINTAIN

Maintenance calendar starting from season of 2026

Month	Task	Description
May	Project reassembly: set up grapevine trellises, meditation area, and wind chimes.	Bring out the wind chimes, set up meditation space and remove any protective covers.
	Grapevine pruning & soil health	Prune vines to promote growth and support the soil with compost as needed.
June	Check for pests, disease, and weed control.	Monitor grapevines for any issues, weed/mow around the base, and observe and act on pests or disease.
	Wind chime maintenance	Ensure the chimes are functioning properly and producing clear sounds. Reposition or clean as necessary.
	Meditation space evaluation	Inspect for any wear and tear or damage due to weather or usage.
	Bring potted plants	Set up potted plant garden, take care of watering throughout the summer.
	Regular cleaning	Make sure the space is tidy.
July	Regular cleaning	Make sure the space is tidy.
August	Harvesting and vine check-up	Harvest ripe grapes and evaluate the health and yield of the vines.
	First preparations for winter	Take note of any repairs needed before deconstruction in September/October.
	Regular cleaning	Make sure the space is tidy.
September	Harvesting: finish harvesting grapes	Harvest ripe grapes.
	End-of-season cleanup	Prepare vines and garden area for winter by removing any dead or diseased plant material
	Remove and store elements	Take down and store wind chimes, meditation elements, and pots to prevent damage during winter months.
	Protect grapevines	Protect vine bases with mulch or fleece if needed.
October	Last check: ensure all items are secured and protected for winter.	Anything that's yet undone must get done now!
November - April	No active maintenance required.	Keep eyes open for wind chimes offered in the recycling centres and free marketplaces, tough

Table 9: Maintenance calendar for the project

EVALUATE THE DESIGN

EVALUATE THE DESIGN

What worked?
The only aim I set to myself in the beginning was to find good use for the unused hoop house frame. Indeed, I have succeeded in that. I am very excited about this design and can't wait to get it started next spring!

I am happy with my design choices. The design creatively combines several features into one cohesive space. Planting grapevines improves the biodiversity onsite, and I've been wanting to have them for a while now outdoors.

The addition of a meditation area and wind chimes made the space suitable for more people care. I also enjoy being able to create yet another showcase object to use on our permaculture courses.

What didn't work
Without a plastic cover or other form of shading, the grapevines may be vulnerable to overexposure, leading to potential stress and reduced growth. I am somewhat concerned about this, but will need to observe if this really is a problem.

I am also slightly concerned about the area choice. It is very close to the garden compost. It is certainly the best area we have onsite for this, but I will need to take extra care maintaining the compost so that it doesn't smell.

Yet another design I am unable to implement before submitting it for review, but my urge to graduate is stronger than my annoyance of "not finishing".

EVALUATE THE DESIGN

Ethics - does the design align with the ethics?

1. Earth care
   - The project repurposes an existing hoop house frame, which minimizes the need for new materials and reduces environmental impact.
   - Planting different grape varieties helps promote biodiversity.
2. People care
   - The dedicated meditation/yoga area in the nature fosters mental well-being, providing a space for relaxation, reflection, and mindfulness.
   - The wind chime garden adds a sensory dimension to the space
   - The combination can really make it a reviving space for us and our guests.
   - Accessibility and proximity have been taken into consideration, to encourage frequent use and make maintenance easier.
3. Fair share
   - By producing grapes, the project has the potential to share surplus produce
   - The inclusion of a diverse range of elements showcases how to use small spaces creatively, which is great to demonstrate during our courses
   - It provides opportunities for community involvement and workshops, promoting social cohesion and learning.

REFLECTION ON MY WORK

REFLECT ON MY WORK

Framework
I tweaked OBREDIM to OBRIEDIM (Observe, boundaries, resources, ideas, evaluate, design, implement, maintain). This worked well. As I didn't have a vision in the beginning, it was crucial to really trust and follow the process and follow the framework, concentrating on observation and evaluation, and to include the Ideas key point in there. I very much enjoyed doing open-ended permaculture design and will do it again in the future.

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Ethics
Earth care
  • The design choices align with Earth care - no new materials needed, increase biodiversity...
People care
  • The design choices align with People care - elements for well-being, decent accessibility, low maintenance needs...
3. Fair share
  • The project has many possibilites to demonstrate fair share and creative use of limits: sharing grapes, up-cycling materials, small scale intensive systems...

I used the Ethics in the beginning to give the work some guidance before starting, and evaluated the final design brief against them at the end.

Even not documented explicitly, I feel I have adequately considered the ethics throughout the design work. They are really so deeply engrained by now, I don't know how it would be possible to NOT have them guiding the work throughout.

REFLECT ON MY WORK

Principles

I used four Holmgren principles to guide me before starting the work, and used partly the same, partly others Holmgren principles as an evaluation tool when working on the "what" element of the design.

It's not my deepest work when it comes to the principles, and also I've just used Holmgren ones. In my next designs I will try to reach for other principle sets again. I like using principles and will make designs in the future that have them more front and center again. It's good to switch up your tools from time to time, though.

Tools

Zones & Sectors

Must-haves for land-based designs. Used here as observations, as we have them done for the whole site already, as well as Zones as part of demonstrating in the design phase. Not very deep work, but demonstrative.

PMI

Old favorite, will use again and again. Useful for almost everything!

PASE

helped me analyse the different uses well. I've used PASTE before, but I liked the human use emphasis of the PASE, which suited this design well.

SWOC

Old favorite, will use again and again.

REFLECT ON MY WORK

Tools
Photos & maps
Photographing the possible locations gave me a good overview on their characters and helped me remember them when documenting the design. The map shows my location ideas and goes hand in hand with the photos. Both tools were useful in this design.

Ian McHarg's Exclusion
Finally a chance to use this interesting tool! I enjoyed exploring it and it was integral in choosing the location. I recommend this to anyone doing projects without a set space or end result in mind. I will use it also whenever chance arises in the future.

ChatGPT
Is AI an appropriate technology? Someone asked this in a permacuture Facebook group (oh the irony) maybe a year ago. The general consensus was that no, no way, never. I didn't quite understand why. Of course there are big problems, starting from the huge energy use and of course the copyright issues. It can't be right to use other people's work like this, can it?

The way I've been thinking about it is: how is using ChatGPT or another text-based AI any different than asking a friend or a colleague for help. Actually I'm even starting to think the aversion to use these tools is just another "plot" of the extroverted society to keep introverts and nerds in their place. Calling a friend or a "friend" from your vast network of aquanintances for help is good, but heaven forbid you use the collective knowledge the nerds have brought to your fingertips without having to interact with "real" people. The need and the must of having wide networks of people falls away, and that must be scary for the people who see that as power. I don't know, this might be very far fetched, but it's just a thought.

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REFLECT ON MY WORK

Tools

ChatGPT (continued)

My use of AI in this design was to help me come up with ideas and organize some knowledge. I could have done this by brainstorming with friends and perhaps using a virtual assistant or just by myself, too, given the time. Did this way save me time? Yes, many hours. Did it make the work easier for me, not forcing me to operate in ways I don't prefer? Of course.

Not all of us want to build these tribe-like "communities" and be talking with people all the time. I say using tools that help us operate in our most effective manner are appropriate technology when it comes to People care. Earth care, not necessarily so much. Fair shares? Not sure. This is indeed a dilemma.

I hope more people and permies reflect on these issues instead of saying an absolute NO from the gut, or just accepting the technology without question, like they've done with other digital tools like social media and platforms for teleconferencing, education and collaboration.

For now, I find ChatGPT very helpful and will continue to use it in my designing work whenever it makes sense.

Lessons learned & next steps

I loved the work without a clear vision! It was great to create a complex design around a very small project. I gained new viewpoints to designing thanks to these approaches.

This is my last Diploma design, which is very, very exciting! I can't wait to graduate. My next steps are to keep designing and plan my accreditation event!

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THANKS

Thanks goes as always to Dominik for supporting my design work and reading through my drafts!