

# Kersten Williams Fall 2023 Service Design Masters diploma Regenerative Gardening and Foraging The Oslo School of Architecture and Design

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## Introduction

The concept of sustainability has gained increasing attention in recent years due to the pressing environmental challenges faced by the world, such as climate change, loss of biodiversity, and food insecurity (Kates et al., 2005; Willett et al., 2019). In response to these challenges, regenerative gardening and foraging have emerged as innovative approaches prioritizing ecological and social sustainability. These practices involve cultivating food to restore soil health, promote biodiversity, and minimize waste (Lal, 2018; Smith, 2020). Regenerative gardening and foraging are essential in urban areas, where access to fresh and healthy food can be limited (Dubbeling et al., 2010).

This master's diploma aims to explore how service design can be used to support regenerative gardening and foraging in Oslo, Norway. Oslo has made significant efforts to become a more sustainable city, including setting ambitious targets for carbon neutrality, promoting urban agriculture, and creating green spaces (Oslo Kommune, 2019). However, there is still much work to accomplish to ensure that all residents have access to healthy and sustainable produced food.

## The following research questions guided the research:

What challenges and opportunities are associated with regenerative gardening and foraging in Oslo, Norway?

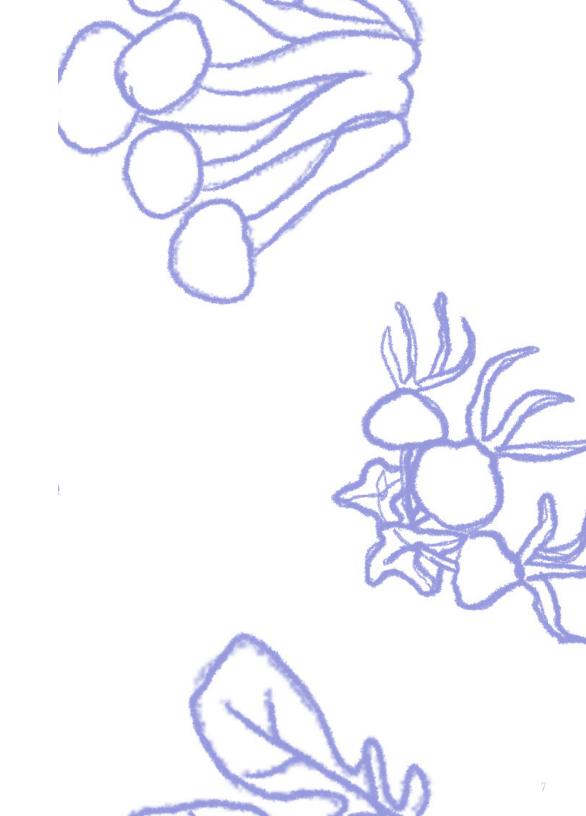
How can service design be used to support regenerative gardening and foraging in Oslo, Norway?

What services or products could be developed to support regenerative gardening and foraging in Oslo, Norway?

The research will involve user research with urban gardeners and foragers in Oslo and with relevant stakeholders such as urban planners, homeowners, people who eat, and environmental organizations.

The ultimate goal of this diploma was to get people involved in regenerative gardening and foraging and offer insights and strategies that can be applied to other cities facing similar challenges.

By employing a design-driven research approach, this diploma seeks to create practical and innovative solutions that support the regeneration of urban ecosystems and promote social and ecological sustainability.



Since moving to Norway, I haven't had a yard, and just missed it. I missed growing my own food, having trees that fruited, and just missed being in my garden. I made up for this loss by asking others if I could pick some of their fruits, and in exchange I would bake them a pie. This quickly became the heart of my project.





I am also a new mom, and with that comes the desire to pass down knowledge to my son. While thinking of a topic I wanted to focus on for this project, I wanted to make sure he could be involved every step of the way. In the first few weeks after having my son, I noticed his love for the outdoors.

This was my solution to be able to spend precious time with him, while working on a topic I love, growing life. So a special thanks goes to him, doing this work with a six month old has been more of a challenge than I had expected. However, it has been a labor of love.

# Design in a state of play

By setting these principles I can check to ensure that my design solutions are true to the type of designer I am, and the designer I want to continue being.

#### **Everyone can play:**

This is my term for universal design. If it this work is exclusionary, it isn't any fun nor does it build anything positive for the future.

#### It can always be better:

There isn't an end all be all solution, there are opportunities to expand and improve.
What works now may not work in the future.

#### **Listen hard, change fast:**

I picked this term up while at a company I use to work for, people will tell you exactly what they need you just need to be ready to listen and be okay with having to change.

#### It must be enjoyed:

Design is fun. Humans do not tend to use things, services, etc if it isn't enjoyable. Some discomfort is always needed for growth but if something is not easily accessible, hard to understand, or too difficult find it isn't going to work.

- 1. Everyone can play
- 2. It can always be better
- 3. Listen hard, change fast
  - 4. Must be enjoyed



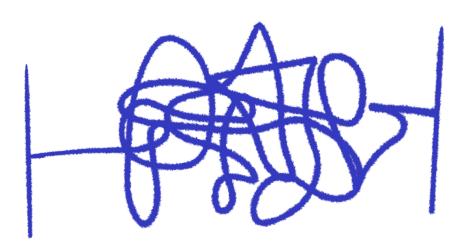




# Conceptual Framework

As a designer, I tend use a Bricolagical approach towards solving problems. The designer know as the bricoleur uses an approach which the actor solves problems using only available resources.

Because of this, I acted as designer, anthropologist, user, adventurer and something in-between.



In this process, I went back and forth a lot during the journey. I am sure it appeared as chaotic to anyone not working through it with me, or living in my head.

#### **Field Work**

In my initial days of research, I chose to do field work. I broke it down into three various aspects. Grow my own, find my own, and make my own.

By doing this it gave me the unique opportunity to hold continous feedback sessions with those around me doing the same. It also gave me the freedom to do informal interviews simultaneously.





To engage others in the conversation, I initiated dinners where I prepared food from foraged finds and gardens for friends, family, and neighbors.

### Pickled Califlower

1 teaspoon coriander seeds 1 teaspoon mustard seeds 1/2 teaspoon cumin seeds 2 cups cider vinegar 5 medium garlic cloves, peeled & 1/2 cup granulated white sugar 2 tablespoons Kosher salt 1 teaspoon black peppercorns 1 small head of cauliflower, cut is

### Beach Cabbage Stew

750 grams beach cabbage

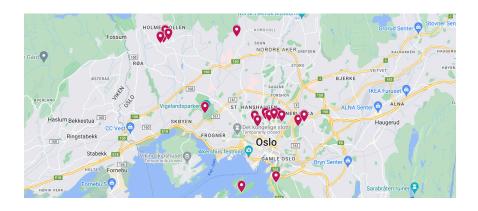
2 large onions 4 radishes

2 large tomatoes

1 sweet paprika

In doing so, many people became interested in my discoveries as well as my recipes. Which I created shareable recipe cards to give to those who asked.

"Let me know



I've been cultivating my own food since childhood. For this project, I created a balcony garden to test my ability to grow a variety of produce from seeds for my family. I grew tomato, paprika, rosemary, radish, lettuce, carrots, catnip, and cucumbers from seeds. I also experimented with composting to improve soil health.



To extend my field work, I began foraging for food. Over the fall season, I've explored forests, parks, and the Oslo area in search of "free food." I documented where I found each food source on google maps.













Questions of why there weren't more access to fruited trees through out the city led to desk research on the history of city fruited trees as well as a deep dive into what was acceptable in terms of foraging.

Community gardens, like at various Barnehage and hageby, are often rich places that people will "slång" or take from in city spaces. This leads to question why not have fruited trees in green spaces.

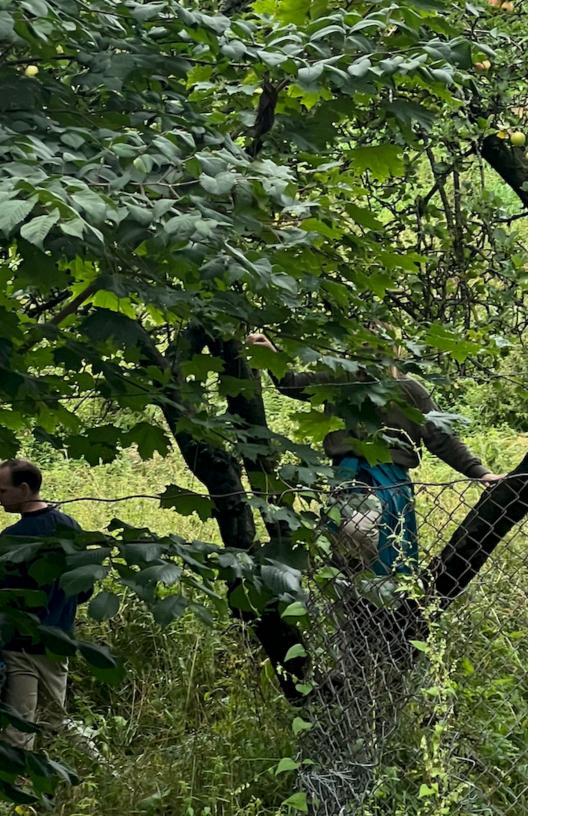


While Norway is better than most in terms of providing spaces for fruiting trees in the city, most Urban planners view this concept as a nuisance.

Traditional urban planning may prioritize ornamental trees and landscaping over fruit-bearing trees. The selection of trees in public spaces is often based on aesthetics, ease of maintenance, and resistance to pests, rather than fruit production.

Fruit trees require proper care, including pruning, pest control, and harvesting. Municipalities and property owners may be hesitant to plant fruit trees due to concerns about maintenance costs and potential litter from fallen fruits. (Colinas, Juliette & Bush, Paula & Manaugh, Kevin. 2018)

Despite this gardens throughout the city are planned and well loved/sought after.



"I'd give them seeds, well I'd ask for their experience then give them seeds"

> "it was not like stealing... more like taking but in a good way"

"it's extra fun when you find it yourself... It becomes your own little treasure map of where you find different plants"

> "We can't grasp the idea that this only exists now, and not after a certain period"

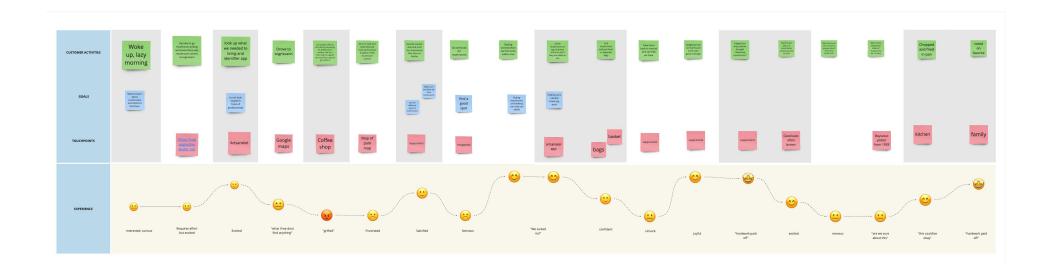
"I did this as a child, so I wanted to share with my children"

"we can't share that, you might come back and pluck them all"

"I'm out in the forest anyways"

"Det finnes nok ingen større portvoktere enn Soppfolk, så lykke til"

"because in Norway we can, there are laws in place"





I wanted to see what the foraging experience would be from the lens of a newcomer, I asked a friend who had seemed interested in the process if he wanted to go.

I followed him and asked questions to map out his experience from deciding to go, while out in the thick of it, going to Soppkontrol and finally making/tasting his finds.

This informed my decisions going forward on directing various problems and as well as fears associated with foraging.

After much search of finding my own mushroom spot, I quickly began developing a cultural probe to see if I could buy a spot. Using Finn, I posted an ad to go on a mushroom trip. Quickly the ad was reported and taken down.

I committed a major faux pas. Mushrooms are secret and sacred. Once you find a spot people do not share lightly for fear of running out.

What was culturally acceptable had to be a part of this equation, and I needed to learn the unspoken rules.



Min FINN / Mine annonser / Sopp tur/plasser rundt Sognsvann eller Fr...



Til kontroll 60 dager igjen

Endret 23. august 2023

Sopp tur/plasser rundt Sognsvann eller Frognerseteren

Torget ønskes kjøpt

ad got taken down within two days

but not before it was saved by 46 people and liked by 10



#### **Visitor**

unique people have seen the ad

Once: 18 people

Two to five times: 3 people

More than five times: 0 people

Stats on the ad after the first day

I needed to visit the open Hageby dagen to meet people who were growing, and exchanging goods.

I attended many but my favorite was the visit to Solvang. I used to live at the Sogn Studentby and frequented the Hageby often, and spoke to people previously about "slång" apples.

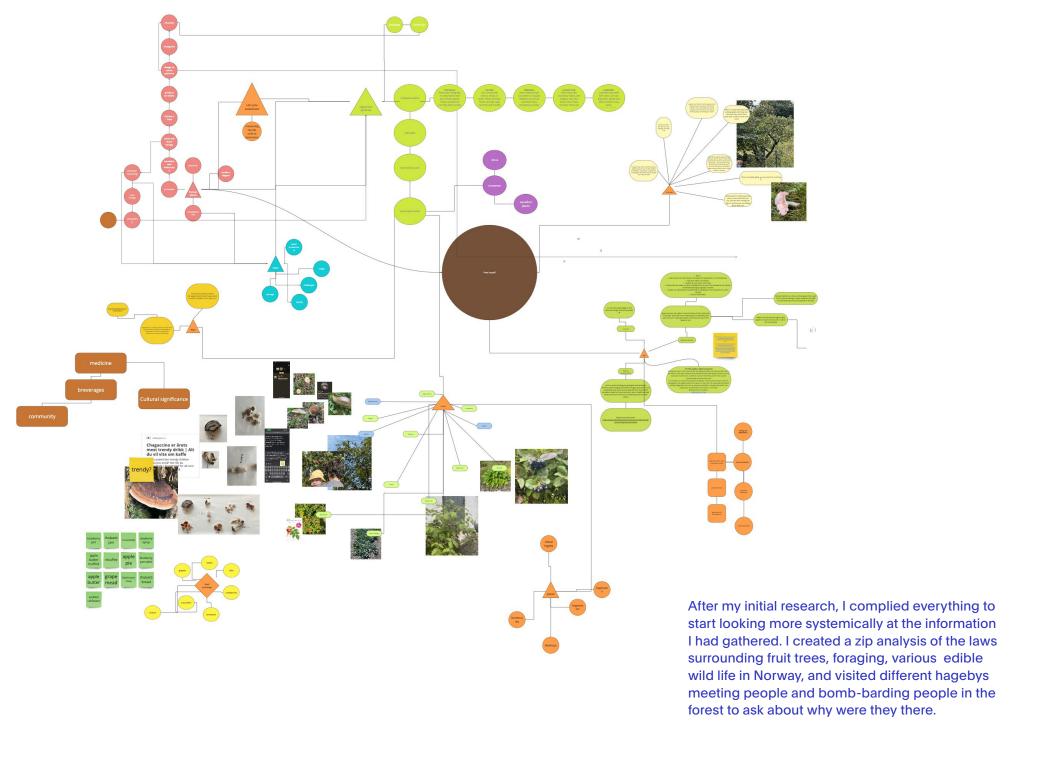
Here I found more people who showed interest in selling, exchanging or giving away their goods. As well as many tips on gardening.







Solvang Kolonihager



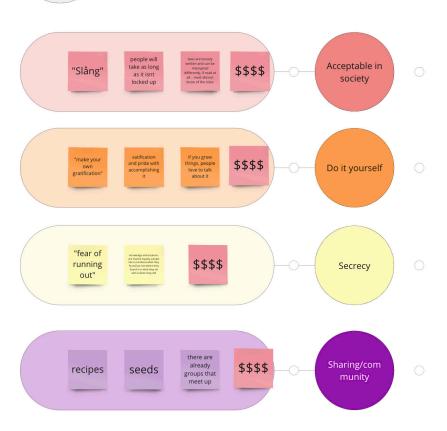
Store prices per kg	Meny	Oda	Spar	Average cost store	Average per person per year (kg)		Price per year
Potato	<u>23</u>	<u>15.24</u>	<u>25</u>	21.08	18		379.44
Carrots	<u>47.25</u>	<u>30</u>	<u>39.87</u>	39.04	<u>7</u>		273.28
Radishes	<u>179.33</u>	<u>230</u>	<u>179.33</u>	196.22	1	guess	196.22
Kale	<u>184.5</u>	<u>127.5</u>	-	156.00	3	guess	468
Brokkoli	27.9	24.9	<u>29.9</u>	27.57	4	guess	110.2666667
Sellerirot	74.9	46.2	<u>74.9</u>	65.33	2	guess	130.6666667
Beter	79.8	<u>52.83</u>	<u>75</u>	69.21	4	guess	276.84
							1834.713333

Seed prices	Price	Yield per seed/plant	# of plants/seeds	# of yield from one harvest With 100% success rate	kilo amount	price per kilo	Price per year	# of years seeds would last for 1 person
Potato (based on 1 kilo)	21.08	7.5	11	82.5	7.5	2.81	50.59	0.42
Carrots (1 seed per carrot)	39	1	2000	2000	286	0.14	0.96	40.82
Radishes	39	1	250	250	6.25	6.24	6.24	6.25
Kale	39	1	40	40	18	2.17	6.50	6.00
Brokkoli	39	1	40	40	16	2.44	9.75	4.00
Sellerirot	39	1	200	200	135	0.29	0.58	67.50
Beter	39	1	250	250	27.5	1.42	5.67	6.88
			Combined Analysis for what 1 person eats a year					
			Store	Garden	Difference	% cheaper		
		Potato	379.44	50.59	328.85	86.67%		
		Carrots	273.28	0.96	272.32	99.65%		
		Radishes	196.22	6.24	189.98	96.82%		
		Kale	468.00	6.50	461.50	98.61%		
		Brokkoli	110.27	9.75	100.52	91.16%		
		Sellerirot	130.67	0.58	130.09	99.56%		
		Beter	276.84	5.67	271.17	97.95%		
			1834.71	80.29	1754.43	95.62%		

I needed to know if it was possible to grow your own food at a low cost or if it would be cheaper to shop at the grocery store. I compared the cost of common produce in grocery stores with seed costs.

I leveraged the internet to see how many kilograms (kg) a year a person consumed of each item, and then extrapolated these to get the total cost for both seeds and bought produce. The analysis only contains produce that can be naturally grown in Norway, assumes a 100% seed success rate and does not take into account other growing supplies such as dirt, fertilizer, pots, etc.





Common themes started to occur. However an overarching theme of money appeared within each theme. Some foragers were not just sharing their "treasure" with friends or family but for profit. An issue arrises when doing it this way, because typically these groups will overharvest to make more captial.

We can use the example of biodiversity when looking at Lion's Mane mushrooms. These fungi were once bountiful in Norway, whereas now they are a protected speices. (Linnaeus, (Schenck, (Linnaeus, (Ascanius, (Camerano, Lév., Flatberg, and (Hue) P.M. Jørg)

#### 1. Plant Identification

Only harvest plants and mushrooms that you can positively identify and are certain are safe to eat.

#### 2. Harvest Responsibly

Harvest plants in a sustainable manner, leaving enough behind for the ecosystem and future growth. Take only what you need, avoid overharvesting, and follow ethical foraging practices to maintain biodiversity.

#### 3. Respect for the Environment

Practice low-impact foraging and honor the natural environment.

(soppognyttevekster, Edible Food in Norway)

#### **Friluftsliv Folk**

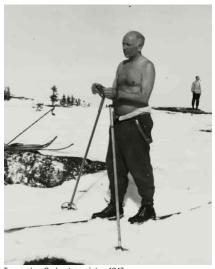
While conducting intensive field work research. I came to know the term Friluftsliv. Everyone that I spoke too while doing gorilla style interviews mentioned this philosophy in some way.

I used this philosophy to my advantage, in conducting my interviews. I met people in the forest, and many were very excited to speak openly.

I soon realized this was who I was solving for, and wanted to connect even more to nature but didn't know where to start.



NIBIO bildearkiv



Tranmæl og Gerhardsen påsken 1947 Arbeiderbevegelsens arkiv og bibliotek

#### **Friluftsliv principles**

#### **Outdoor Education:**

Friluftsliv is often integrated into the education system in Norway. Children are exposed to outdoor activities from a young age, fostering a lifelong appreciation for nature and outdoor pursuits.

#### **Solo and Social Activities:**

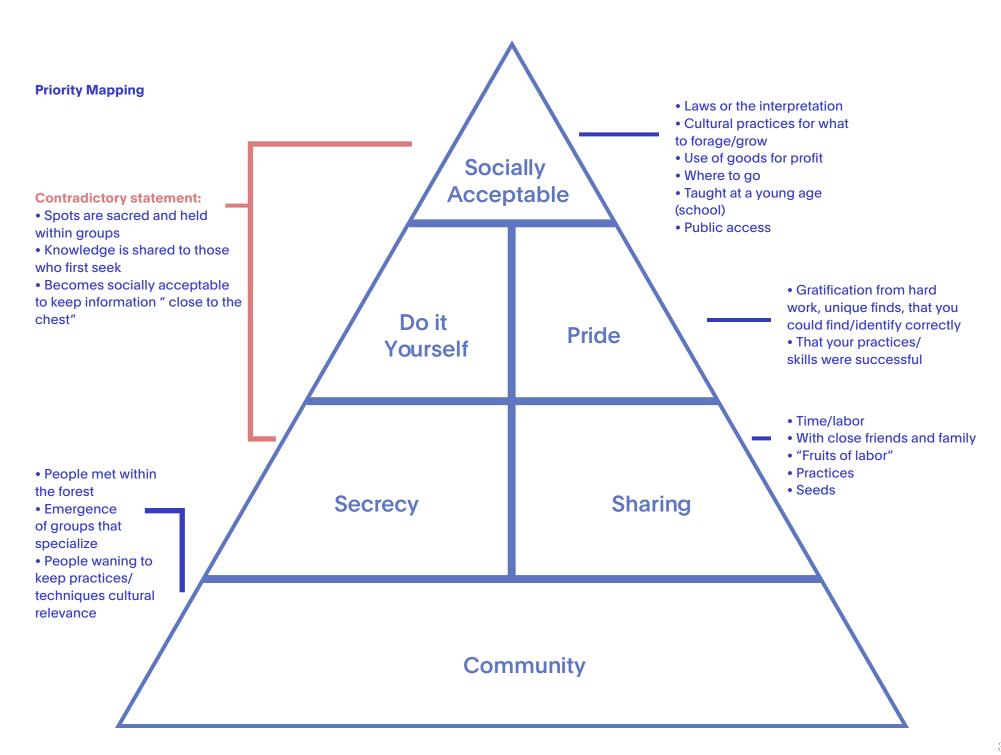
While friluftsliv can be a solitary experience, it also emphasizes the joy of shared outdoor activities. Group hikes, camping trips, and communal gatherings in nature are common expressions of this philosophy.

#### **Cultural Significance:**

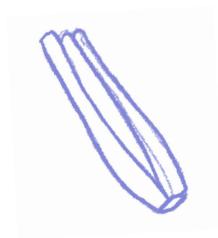
Friluftsliv is deeply ingrained in the Norwegian cultural identity. It's not just a hobby but a way of life that influences how people approach their leisure time, vacations, and even work-life balance.

#### **Legal Right of Access:**

Norway has a unique legal concept called "allemannsretten," which translates to the "right to roam." This legal right allows people to access and enjoy uncultivated land, promoting the idea that nature is for everyone to explore and appreciate. (Gurholt, Kirsti & Haukeland, Per. (2019))



# Key Insights



#### **Do it Yourself**

Individuals engaged in the practices of foraging or personal food cultivation exhibited a pronounced inclination towards discussing their discoveries and achievements.

It was readily observable that such topics fostered open and enthusiastic dialogue among enthusiasts. Evidently, there existed a palpable sense of pride in recounting one's accomplishments and experiences in this domain.

#### What's Acceptable

Within discussions on foraging and food cultivation, a dual theme emerges. People generally grasp the existence of governing regulations, yet nuances elude them, fostering uncertainty.

Many assert a legal right to harvest from private gardens, often hinging on specific conditions. Ambiguity extends to considering unfenced gardens and publicly accessible produce, suspended from street-side enclosures, as legally accessible.

Simultaneously, when broaching the 'how,' 'why,' or 'where' aspects of these pursuits, a notable reluctance surfaces. Enthusiasts openly share discoveries and achievements, but conversations involving methodologies, rationales, or locales frequently pivot swiftly, suggesting unspoken boundaries in this discourse.



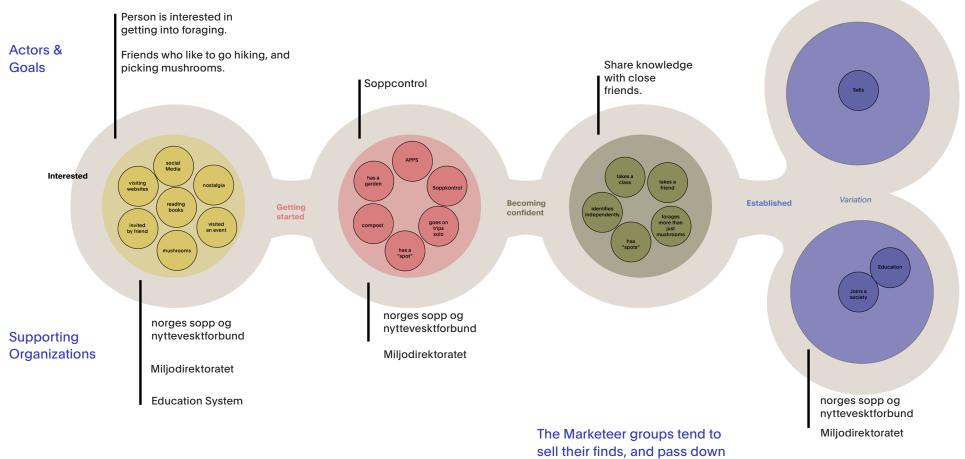
#### Fungi are a gateway

When discussing the topic of pride and accomplishment of foraging, it seemed there was a common denominator.

Mushrooms led to discussions of sustainable growth, foraging adventures, the number of plants and wild life in Norway, health of soil and many other topics of similar nature. The instant gratification of finding, growing and procuring ones own food.



#### Lifetime Landscape Mapping



Exercise of mapping out the lifetime landscape of foraging to gain better understanding of the evolution over time. Here I discovered that once people became experts, they veered off into two groups I call them the Educators and the Marketeers.

sell their finds, and pass down the tradition to their children and so forth. This group was quoted of saying, "I'm in the woods already, might as well make money off of it"

The Educator group however tends join various societies, and start educating others in mycology, regenerative gardening, etc. I wanted to focus on the sweet spot of getting started to help guide people towards deeper connections within a community.

# Service Offering

The &gathers box is designed for those who enjoy being in nature, but are unsure how to taste it fully. The contents are designed to take ones experience and appreciation to the next level by expanding upon the possibilities that nature has to offer.



## **Curated Dinner Party Boxes**

&gathers provides curated dinner party boxes featuring locally sourced and where to find foraged ingredients. Each box is designed in collaboration with local chefs to offer innovative and hyper-local menus.

#### **Benefits:**

Explorers can enjoy a dining experience that combines the thrill of foraging with the pleasure of outdoor dining, fostering a deeper connection with nature and local cuisine.

#### **Foraging Adventures**

The box includes foraging guides and maps, encouraging explorers to venture nearby locations for seasonal ingredients.

#### **Benefits:**

Explorers gain hands-on knowledge of foraging, connect with nature, and appreciate the art of finding their own food.

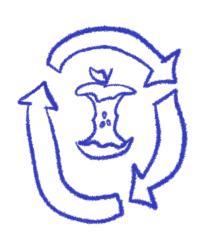


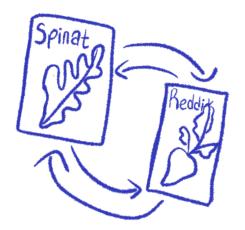
#### **Seed Exchange Program**

&gathers promotes sustainability through a seed exchange program. Each box has different seeds and gardeners are encouraged to contribute to the community by sharing seeds through annual meetups.

#### **Benefits:**

Supports biodiversity, sustainable agriculture, and community engagement, reinforcing the brand's commitment to environmental stewardship.





#### **Sustainable Living Tips**

The website features a section dedicated to sustainable living tips, offering guidance on reducing environmental impact, choosing sustainable products, and supporting local initiatives. An example would be how to use conkers to make laundry detergent.

#### **Benefits:**

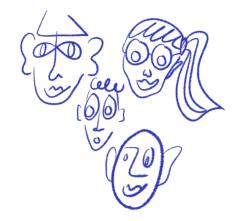
Explorers can integrate eco-friendly practices into their lifestyle, aligning with the friluftsliv philosophy of responsible and mindful living.

#### **Community Engagement**

&gathers encourages community engagement through social events, such as foraging meet-ups. These events foster connections among Explorers who share a passion for nature, food, and sustainable living.

#### **Benefits:**

Explorers can build a community of like-minded individuals, share experiences, and contribute to a collective effort to embrace the friluftsliv lifestyle.



#### **Educational Content**

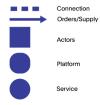
The platform provides educational content, including foraging guides, seasonal planting guides, and information about local edible plants. This content enhances Explorers' knowledge of the natural environment.

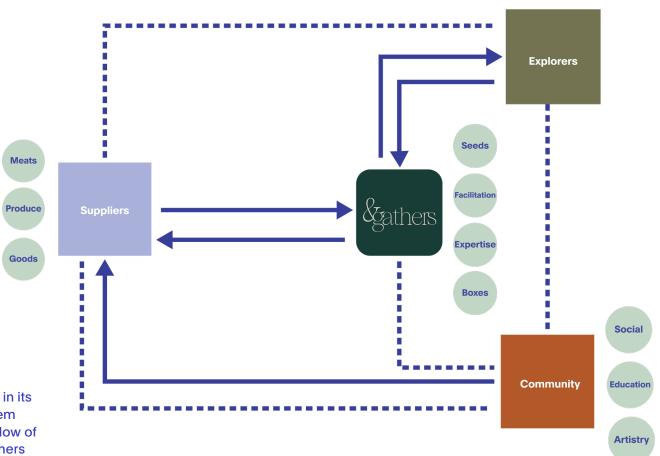


Explorers can expand their understanding of local ecosystems, edible plants, and sustainable practices, empowering them to make informed choices.



#### **Service Ecosystem Map**





To understand the system in its entirety, I conducted system mapping to highlight the flow of information from the &gathers service, to the suppliers, to the explorers and back into the community.

#### **Continuous Interaction**

For continuity, the service will facilitate community meet ups throughout the year for foraging, social mixers, and opportunities to meet suppliers directly. These elements bring people out of their comfort zone and tie them back into the community.

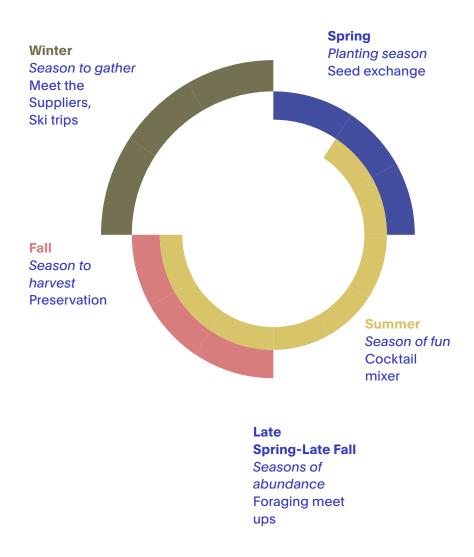
For this to be successful a "great first impression" is needed.
Without that initial introduction people are liable to fall out of the service without seeing the full benefits. See brand understanding and values.

Once fed into the community, members should feel connected and confident to bring in others.



Introduction

#### **Social Calendar**



# Brand Identity & Values

In initial testing of concept, I got feedback from a survey posted on social media that the service had the feeling of "how to: survival guide", when the concept was tested with imagery, it became more clear that it was not a doomsday preppers guide.

This informed my decision of the use of nostalgia. While the service and experience is new, the act of foraging and growing ones own food is an old concept.

By using imagery from the National Photo Archive, I can ground the experience back to those roots.

grow, share,

## Seeds of connection, in gardens they sow

Where culinary art meets the wild. Immerse yourself in a unique dining experience that blends curated dinner party plans with the thrill of foraging hyper-local ingredients. Explore nature's bounty, savor unforgettable flavors, and embark on a journey of taste and adventure with &gathers.



**Demographic** 

**Age Group:** 25-40 years old **Location:** City dwellers

#### **Psychographic Analysis**

**Lifestyle:** Embraces the friluftsliv philosophy, seeks outdoor experiences, values sustainability.

Interests: Nature exploration, outdoor activities, culinary adventures, sustainable living.

**Values:** Connection to nature, community engagement, authentic experiences.

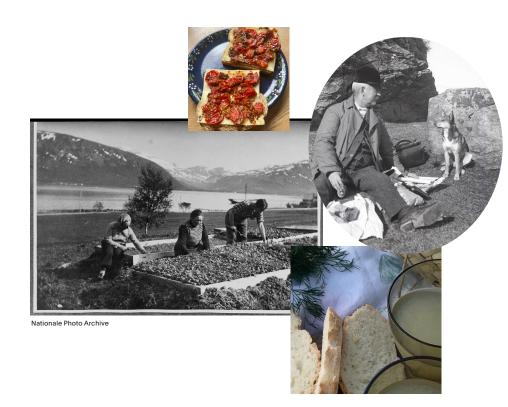
#### **Friluftsliv Folk Lifestyle:**

Friluftsliv enthusiasts share a deep appreciation for nature, aligning with the core philosophy of this service. This group often seeks a balance between urban living and a connection to nature.

#### **Call to Nostalgia:**

Growing up, many people in Norway went foraging with the Barnehage and their parents. This reconnection by use of user created content, mixed with imagery from the Nationale Photo Archive, carries the message of returning to nature.







#### **Events**

Meal kit, maps, recipes



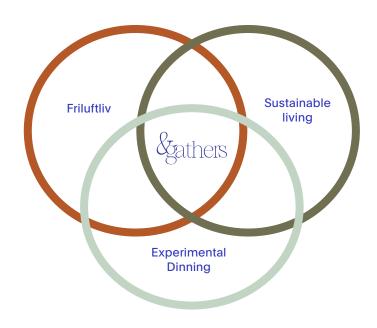
#### **Education**

Articles, seasonal planting guides, foraging safety, gardening tips



#### Community

Seed exchange, foraging meet ups, Seed Library, Community message boards



#### **Market Trends**

#### **Rise of Friluftsliv:**

Growing interest in the friluftsliv lifestyle, especially among the target age group.

#### **Sustainable Living:**

Increasing demand for sustainable and locally sourced products.

#### **Experiential Dining:**

Trend towards unique culinary experiences and foraged ingredients.

## Unique Selling Proposition (USP)

- Offers a distinctive blend of unique dining, foraging experiences, and community engagement, aligning with the friluftsliv lifestyle.
- Emphasis on sustainable living, contributing to a local seed exchange program, and promoting biodiversity.

#### **Recipes through the year**

Spring:	Summer:	Fall:	Winter:
Zuppa Toscana	Cucumber	Bacalao	Julenisse
Birch Syrup Samosa Chaat	Radish Salad	Mushroom Soup	Glogg

#### Goods through the year

Spring:	Summer:	Fall:	Winter:
Onions	Berries	Squash	<b>Canned Goods</b>
Potatoes	Tomatoes	Pears	Meat
Kale	Cucumber	Radish	Beets
Cauliflower	Honey	Pumpkin	Nuts
		Berries	Spices

#### Foraging through the year

Spring:	Summer:	Autumn:	Winter:
Nettles	Berries	Chestnuts	Wintergreen
Dandelion	(blueberries,	Acorns	Rose hips
Mushrooms	raspberries,	Apples	Pine needles
Rhubarb	strawberries)	Mushrooms	Wild leeks
	Elderflowers	Rose hips	
	Wild roses		
	Mushrooms		

soppognyttevekster, Free Food: Wild Edible Plants of Norway

#### What's in the box?

Monthly recipes, local produce, foraging map.

Small: Serving 1-2

1 Main & 1 Complimentary

Medium: Serving 4-5
1 Main & 2 Complimentary

**Large: Serving 7+** 

2 Main & 2 Complimentary

### Main Examples Ramslok Cream Cheese

Leg of Lamb

#### **Complimentary Examples**

Spices Canned goods Cheeses

> Each box tells where the produce is grown and by whom.





Boxes are personalised to deepen the connection between &gathers and the explorers.

But it is more than just a box, the box is the ephemeral vehicle to welcome explorers into a more nature sound lifestyle.

# User Experience Journey

each season.

pickled califlower through

us? "

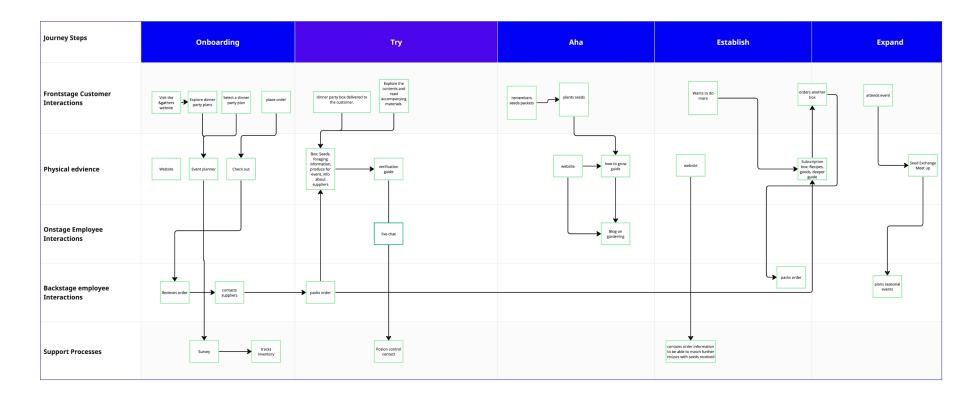


the goods.

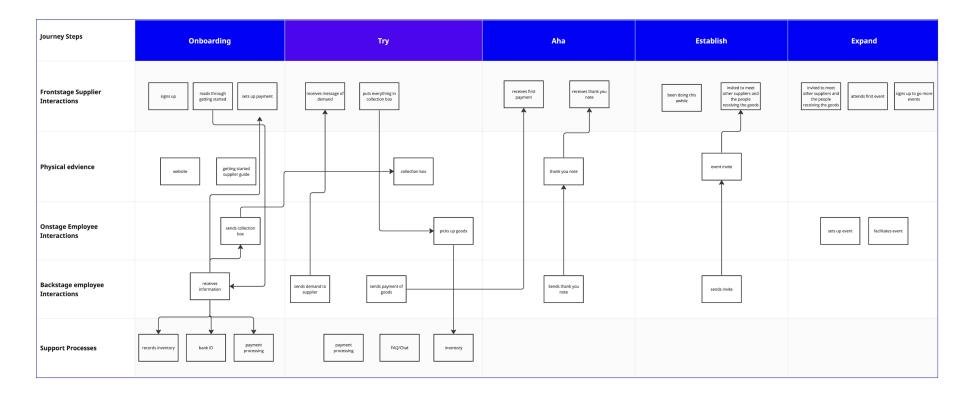
the boxes.

# Service Blueprint

#### **Explorer Facing**



#### **Supplier Facing**



#### **Potential Suppliers**

Kvann McMillion Farms Kolonialhage Oslo Kooperativ Home Owners

# Challenges & opportunities

#### **Supply Chain Logistics**

#### Challenge:

Ensuring a consistent supply of local ingredients, especially during periods of high demand.

#### Mitigation:

Develop strong relationships with local suppliers, implement efficient logistics, and maintain a flexible supply chain.

#### **Plant Identification Risks**

#### Challenge:

The risk of misidentification leading to the consumption of toxic plants or mushrooms.

#### Mitigation:

Provide robust educational resources, partner with experts, and implement user-friendly guides for safe foraging.

#### **Regulatory Compliance**

#### Challenge:

Navigating and complying with local regulations related to foraging, food handling, and sustainability practices.

#### Mitigation:

Collaborate with local authorities, stay informed about relevant laws, and implement transparent practices.

#### **Seasonal Constraints**

#### Challenge:

Limited availability of certain wild edibles during specific seasons, impacting the variety of offerings.

#### Mitigation:

Educate users on seasonal changes, diversify offerings, and introduce preserved or stored ingredients during off-seasons.

#### **Educational Initiatives**

#### Opportunity:

Providing educational resources on foraging, sustainable living, and the benefits of locally sourced ingredients.

#### Implementation:

Develop guides, tutorials, and interactive content to empower users with knowledge.



#### **Collaborations with Chefs**

#### Opportunity:

Partnering with local chefs for curated dining experiences and unique recipes.

#### Implementation:

Establish collaborations to create exclusive foraged dishes and enhance the culinary offerings.

### **Culinary Events** and Workshops

#### Opportunity:

Hosting live and virtual events, workshops, and cooking classes to enhance user experiences.

#### Implementation:

Collaborate with chefs, experts, and influencers to conduct engaging events that align with the brand's values.



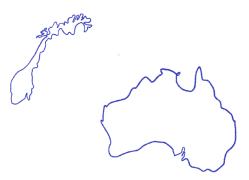
#### **Expansion to New Regions**

#### Opportunity:

Scaling the concept to other regions with similar ecosystems and community interests.

#### Implementation:

Conduct market research, adapt the model to local contexts, and establish partnerships in new locations.



#### **Seed Exchange Community**

#### Opportunity:

Building a robust community around the seed exchange program, fostering sustainability.

#### Implementation:

Encourage users to actively participate in seed sharing, organize workshops, and highlight success stories.

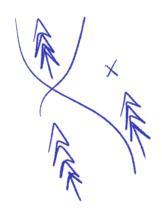
#### **Technology Integration**

#### Opportunity:

Utilizing technology for interactive foraging maps, online community forums, and educational platforms.

#### Implementation:

Develop a user-friendly app, integrate mapping tools, and create an online hub for community engagement.



## Conclusion

The &gathers project aspires to be as a testament to the intersection of gastronomy, nature, and community, epitomizing the friluftsliv philosophy. Through meticulous research, design thinking, and a commitment to sustainability, this project strives to reconnect urban dwellers, particularly in Oslo, Norway, with their natural surroundings, fostering a holistic approach to well-being.

#### Reflection

This journey has been one my life's biggest challenges with having/raising my first child while also juggling the mass of this project. While working on my diploma with him by my side, I continuously thought of the different aspects of this project I could teach him in the future. As I dug in deeper, it became clear that I wanted to inspire him to seek the bounty of nature in as many ways as he could dream.

Coming away from this, I look back happy with what I have accomplished. Initially I was not certain I could complete this venture while tackling motherhood, and caring for an infant. I was nervous I would neglect the work on either or both.

Despite feeling incredibly lucky to be able to do as much as I did, I wish I had more time to do more testing, and gotten more validation. Not included in this report are several design tests completed but did not lead me in a direction that would lead to a successful diploma project. Guerilla gardening that ended up being cut down by lawn mowers, failed interview attempts where I attempted to write in Norwegian that went unanswered, plants that ended up neglected and forgotten in early snow, all of which are insights gained but not needed for this report. If I had more time, I would spend it looking at urban planning to see if there are ways to enact change there.

A special thank you to all of the people that supported me and believed in me during this project.

To Ted Matthews, my advisor, thank you for letting me sit in your floor and talk about Appalachia folk tales. For allowing Finley to slobber and scream during our meetings.

To Drake, my #1 fan, thank you for the time you gave me to focus, the many many cups of coffee and walking around Oslo plucking random plants with me. For helping me water the 75 plants in the house, and being a willing participant in all my culinary endeavors.

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