Urban Land Stewardship: Fostering Pathways for Collective Care

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Submission Information

Submitted to Ontario College of Art & Design (OCAD) University in partial fulfillment of the requirements for the degree of Master of Design (MDes) in Strategic Foresight and Innovation
Toronto, Ontario, Canada, 2025

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Abstract

This major research project investigates the co-creation of urban land stewardship pathways as a mechanism for fostering collective care and advancing equity within major metropolitan contexts, with a particular focus on Toronto. Employing a mixed-methods design, the study integrates semi-structured interviews with participants engaged in or interested in land stewardship initiatives—including subject-matter experts, volunteers, and members of the public—as well as a desire-based foresight workshop with stewardship volunteers. The study also integrates an autoethnographic component. The research examines the capacity of stewardship programs to cultivate inclusionary practices, strengthen mutual aid and relational networks, and challenge colonial land relations through incremental steps toward systemic transformation. Findings reveal persistent tensions between neoliberal policy frameworks and the egalitarian, social justice-oriented ethos underpinning many stewardship efforts. Drawing on findings emerging from the qualitative data, the study proposes a series of recommendations aimed at nurturing systemic change to build resilient and equitable communities that mitigate climate change, enhance collective well-being, and deepen place-based connections. Through the integration of foresight methodologies such as the Three Horizons and Causal Layer analysis, the research advances a vision of future stewardship grounded in relational accountability, reciprocity, and anti-racist praxis, while rejecting scarcity-based narratives.

Dedication

For Tim and Maggie

Acknowledgement

While preparing for this work, I came across this poem which speaks to the reciprocal relationships in nature, entitled *Tall Grasses*, written by Robin Wall Kimmerer, and which you can find reproduced on the Little Toller Books website. This poem explores reciprocity and interconnectedness in nature: Kimmerer describes how fire led to the creation of the prairie, how the wind enriched the soil and how that led to grass. How insects attract birds and how birds bring more seeds and hence biodiversity, enrichening and strengthening the landscape. The last two stanzas of the poem could be interpreted as humans, and our actions, unmaking all of it. Although this poem may have sorrowful undertones that make one reflect on all of the harms that we as humans have inflicted on the earth, a poem like this can act as an entry point to the feelings and emotions that we hold about the earth, nature, and the reciprocity that can be fostered, and the role that we can play in protecting the land, and then in turn the role that the land can play in protecting us, in a sense, fostering reciprocity.

By contrast, in her transformative *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*, Kimmerer states:

"Knowing that you love the earth changes you, activates you to defend and protect and celebrate. But when you feel that the earth loves you in return, that feeling transforms the relationship from a one-way street into a sacred bond."

My conviction regarding this idea of reciprocity has in large part driven the work that I have attempted here. I carried out the majority of the work leading up to this research in the place called Tkaronto, a place that has been home to Indigenous peoples for millennia and on which I am a settler, arriving from Eastern Europe as a child. I live near the beautiful High Park, which has been inhabited and stewarded by Indigenous People since the last ice age glaciers receded, over eleven thousand years ago. Indigenous people created the trails and water routes that eventually became trade networks for European colonizers (Keefe, 2018). The Indigenous caretakers of this land understand and locate themselves within this environment and the land: that they are in reciprocity with it, and that the environment is their teacher, and they took care of it accordingly, knowing that a judiciously managed fire can stimulate the growth of plants and tall grasses, attracting and encouraging the presence of game animals like deer, caribou, elk, black bears and turkeys, while discouraging biting insects, and allowing for their easier movement (Ibid).

I believe that land acknowledgements should include a call to action, or should demonstrate an actionable commitment, and therefore I want to commit to protecting and taking care of the land to best of my opportunities and abilities, thinking back seven generations, and thinking ahead seven generations as well. I want to continue to learn about Indigenous Knowledge and Two-Eyed Seeing, a concept that marries Indigenous and Western worldviews, developed by Mi'kmaw Elder Albert Marshall of the Eskasoni First Nation who describes Two-Eyed Seeing as "to see from one eye with the strengths of Indigenous ways of knowing, and to see from the

other eye with the strengths of Western ways of knowing, and to use both of these eyes together," (Bartlett et al., 2012).

I am a librarian by training and want to take the time to acknowledge that my profession has traditionally been involved in epistemicide -the systematic silencing, or devaluation of entire knowledge systems, particularly those of marginalized or Indigenous cultures, often by dominant Western paradigms. Here, I want to honor the knowledge systems that seem to hold many of the now desperately needed solutions, and that have been so long dismissed and ignored - a small step that I am taking to show solidarity with the struggles that are taking place, in these uncertain and violent times, and on a global scale.

I would like to express my gratitude to Janada Lima - a patient and honest guide throughout my process, and an exceptional instructor who opened my eyes to approaches that had been previously beyond me. Additionally, everyone should be so lucky as to have such powerful instructors as I met at OCADU's SFI program. I wanted to express gratitude to these instructors and also colleagues in the SFI program, who helped me to grow and think in more open and spacious ways about not only our challenges but also the inherent possibilities at our disposal. Your work is both inspirational and aspirational for me, and I know that I will keep learning from you.

I am also grateful to all who participated in the relationship building that took place through this work, and who so generously shared their time, thoughts, and experiences with me throughout. Thank you for trusting me and offering your vulnerability and insights and enrichening the narrative a great deal.

Positionality

I want to thank design practitioner and scholar Leslie-Ann Noel (*Design Social Change*) and critical race theorist and civil rights advocate Kimberlé Crenshaw, whose work helped me to reflect on and understand my positionality, as has the work of my supervisor, Jananda Lima. I come into this as a white, heteronormative, cis-presenting, able-bodied female settler in Tkaronto, arriving from Płock, Poland. My emigration/immigration was related to my father being imprisoned during the Solidarity movement - a social movement centered on union organizing and combating the communist regime, founded in 1980 at the Lenin Shipyards in Gdańsk. I also saw this regime topple at a young and impressionable age, and I believe that this influenced me in believing that through solidarity and connection, systems can change, although I have also witnessed serious and personal consequences of standing up to oppressive systems. This experience has allowed me a lifelong commitment to questioning political systems of power, as well as having faith in strength in numbers, and power in the people.

Being an information professional, with fifteen plus years experience working as a librarian at a post-secondary institution, I want to acknowledge that the field I work in has a colonial history and has participated actively in epistemicide while promoting Western colonial thought, specifically in North America, as superior, and that I am concerned with reconciling past heinous acts and promoting and advocating for different points of view that have been historically dismissed, which has shaped this research as well.

Throughout my pursuit of the MDes., I was introduced to decolonizing methodologies by Jananda Lima and Nadine Hare. I want to observe that I am at the beginning stages of my journey, and am committed to learning from the communities that I am lucky enough to be connected to, and the teachers and peers that have done so much work before me. Janada and Nadine have emphasized the importance of reflecting on one's positionality: thinking about how one's race, gender, and class can make us experience the world around us.

What inspired me to do this work was the volunteer experience that I have had with a well established NGO working in the space of urban land stewardship, and the experiences that I have had there. I do want to acknowledge that my experiences, resulting from my positionality, may be different from someone that holds a different position and set of experiences, and that simply by acknowledging my positionality, and I am not "granting representativity" (Lima, 2021), and that my experiences are very a great deal from others that have had to face greater systemic barriers. I want to acknowledge that I will inevitably make mistakes which I am committed to humbly learning from.

A note on language

I would like to highlight two stylistic decisions that I made throughout this work, and what they are rooted in. The first is that whenever possible and permitted, I write in first person. This is done with the work of Shawn Wilson's *Research is Ceremony* (2016) in mind, where he asks us, as researchers, in commitment to relational accountability, to form a respectful relationship with the ideas that you (we) study." As a researcher, and with encouragement from Wilson's work, I want to form a relationship with the readers of this document: and want them to understand why I decided to study/research this topic, where it fits into my life, as well as how my positionality and bias has shaped and influenced my views. I am hoping that by using the first person throughout, I can emphasize my commitment and relational accountability to those who so generously shared their time with me so that I could delve into the topic, and whose insights, experiences, and reflections on how collective pathways to mutual aid through urban land stewardship could be built I was privileged to hear.

Secondly, this paper has been shaped and influenced significantly by the work of Robin Wall Kimmerer. In her transformative volume, *Braiding Sweetgrass* (2013), she comments on westernized language referring to living, yet non-human beings:

> "When we tell them that the tree is not a who but an it, we make that maple an object; we put a barrier between us, absolving ourselves of moral responsibility and opening

> the door to exploitation...If a maple is an it, we can take up the chain saw. If a maple is a “her,” we think twice.”

Throughout the paper, I will be referring to all living objects, including the concept of Land as them, rather than it, because even though a plant or land may not hold our oversimplified conception of agency, we are seeing an increase in cases where non-human living beings are granted personhood, notably in Bolivia and Ecuador. In the past referred to as naive by the likes of scholars including Derrida (2006), Łaszewska-Hellriegel (2023) argues that the literal idea of consciousness that is linked to the ability to articulate, should be reconsidered and transformed. In Western thought, it seems that nature is something to be dominated - that these living beings do not have agency. Łaszewska-Hellriegel (2023) argues that imbuing non-human living beings with personhood should shift the meaning to the “allocation of rights, basic rights and also human rights in such a way that the environment and animals, i.e. non-human persons, are no longer “’right’-less.” (Łaszewska-Hellriegel, 2023; Fischer-Lescano, 2020). In his essay, “Should Trees have Standing,” the law scholar Christopher Stone, in examining the idea of giving rights to trees, wrote that until the rightless “thing” receives rights we cannot see it as anything but a thing for the use of ‘us’— those who are holding rights at the time“ (1972) - meaning, that we are inclined to treat it in any way that we might desire, so poignantly illustrated by Kimmerer’s example of how we might treat a maple if she was imbued with being: a living entity.

Introduction

Motivations

I live in the city of Tkaronto (Toronto), close to High Park - a beautiful 400 acre swath of land that holds some of the rarest habitats in the city and surrounding vicinity, including the black oak savannah as well as wetlands and marshes, where numerous species of birds, reptiles, and mammals inhabit. This area was once on the shoreline and beach of glacial Lake Iroquois, whose waves created the sandy soils that are present today, eventually shifting south, cutting deep ravines into sandy deposits, retaining water flow, creating the various ponds, including Grenadier and Duck, that are present today, and full of various plant species including sedges, bulrushes, blue flag iris, cattails, and countless others. It is these sandplains that support the Black Oak Savannah, which are interspersed with sassafras groves, and white, red, and burr oak trees. Black oak does not grow densely, thus allowing for countless other native wild species to flourish here. Prior to European Colonization, oak savannahs were widespread. Now, only 0.1% of those that existed prior to European colonization still exist (Dolan and Zhao, 2024.). The black oak savannah that remains the heart of High Park today once stretched from what is now Royal York Rd. over to Roncesvalles Ave. and from Lake Ontario up to Lawrence Ave. This ecosystem was a landscape in which the inhabitants and the natural environment became extensions of each other over four thousand years. Using carefully timed controlled fires, Indigenous people maintained black oak savannahs, simultaneously improving the health of both humans and the ecosystem (Keefe, 2018).

My access to High Park has had an immeasurable positive impact on my well-being and my sense of connection to the natural world and has played a big role in inspiring me to make tangible commitments to caring for the land through a variety of urban land stewardship programs. At the outset of COVID, in a time when many, including myself, were feeling helpless, alienated, and mentally strained, when nature was proving to be a balm for the long-term stress that our isolation was causing, I was inspired, and notably, had the time to pursue a proactive approach to helping to protect and connect with urban nature. I looked around for programs close to me, examining their motivations and what they had to offer and what they wanted to accomplish, and finally landed on a garden stewardship program run by a well-established urban land stewardship organization within the city, near the Humber River. This is my fifth-year volunteering with them, and it is a highlight of the Spring to Fall seasons for me. With a small team of other volunteers, we take care of a patch of land that is technically on private property but that is accessible to everyone, human and non-human. We water twice a week, sometimes more if it is especially dry. We plant native plants, weed non-native ones, and each year, we add little features here and there. This year, for example, we sourced and added rain barrels to collect water in, to make the process of watering the soil slightly easier. Watching the garden grow and change during my time there has been immensely satisfying and impactful.

We have known for many decades what we are seeing now: the long-term effects of the extraction of and our ongoing thirst for fossil fuels, amongst other contributing factors, is playing a huge role in the acceleration of climate change. In addition to this, I live in Ontario, where we are seeing a weakening of environmental regulations for the sake of the prioritization of economic growth, with Bills 5 - Protect Ontario by Unleashing our Economy Act, 66 - Restoring Ontario's Competitiveness, and 197 - COVID-19 Economic Recovery Act, and many more, being presented and passed. In many ways, it is easy to feel hopeless when it comes to the environment - that there is nothing that an individual can do to mitigate the crisis that we are currently in. From a Western perspective, we are often hit with the idea that nature, and the animals that live within it are a commodity for our consumption. Green space in the city is often seen as a means to increase property values within that given area rather than an ecosystem that needs to be cared for and in turn cares for us. There is evidence that municipal governments often rely on their citizens to do a lot of the initiation or lifting when it comes to stewarding areas, with many stewardship programs encompassing neoliberal having the potential to contain neoliberal characteristics to some extent, although nuance exists as well.

But I don't agree that the situation is hopeless. I have been lucky enough to encounter and be in nature at an early age, with adults around me that taught me the importance of respecting the living world - to leave it better than I found it. Because of that I've developed a lifelong respect for it. These early encounters have had a profound effect on me. From as early as I can remember, I have been aware of the devastation that is being wreaked on the environment, largely in the name of economic growth that benefits few. Over the past decade, I have been driven to find opportunities that help me to act in a more proactive way: where I can feel like I am empowered and connected to those with similar goals, rather than sinking into a victim mindset, where environmental destruction and complete loss of biodiversity is inevitable.

My intent

In reflecting on my positionality and my privilege, my intention with this work is to humbly approach this topic and shine light, made possible by the generosity of my numerous participants, on the benefits and possibilities of the urban land stewardship space. My intention is, through close listening, observing, and synthesis that has taken place, a contribution to a greater understanding of what makes urban land stewardship such a powerful experience for many, in addition to its ecological benefits, and to potentially recommend ways that it could be spread, propagated, and made available to others. Part of the preparatory work that I did was to familiarize myself with Indigenous Worldviews and Ways of Being. There is great diversity between and among Indigenous peoples, but there seem to be some commonalities amongst worldviews - and that is that Indigenous worldviews see the whole person (physical, emotional, spiritual, and intellectual) as interconnected to land and in relationship to others, including their families, communities, and nations (Cull, Hancock, and McKeown, 2018).

In her *Original Instructions: Indigenous Teachings for a Sustainable World,* Nelson (2008) writes that for humans to get along with each other and to respect our relations on the earth, we must embrace and practice cognitive and cultural pluralism. In other words, we must value diverse ways of thinking and being. Here, Nelson was not just referring to humans getting along with humans: she was referring to the Indigenous Worldviews that see humans as part of nature, sharing the land with non-human kin or relations which include not only animals, but also the land - lakes, trees, oceans, forests, etc. She states that embedded within most Indigenous Knowledge systems, languages, and worldviews are deep lessons - ones that explore an entirely different reality of our relationship to the land, water, and other elements of the earth and universe, and are based on long-held cultural memories where mistakes have been transformed into lessons instilled into Indigenous cultures and spiritual teachings, and how well we listen to these memories and instructions will determine our future. Additionally, it is important to understand that many if not most Indigenous peoples believe that the center of the universe is in their backyard - in where they are situated, and therefore place-based spiritual responsibility and cognitive pluralism are imbedded in most Indigenous teachings - which challenges Western universalism, as does the work of Leitão (2020). This pluralistic approach demonstrates the relationality that embeds Indigenous ways of knowing - that there is not only “one place” that is holy, or only “one way” that is right - as this is where hegemony often leads us to conflict (Nelson, 2008).

The Haudenosaunee, a sovereign people made up of six nations, and who have stewarded the land on which I live, believe that you gain knowledge by understanding the relationships in the natural world - this core belief of inform a relational and spiritual approach to knowledge and knowing, and as Thomas (2022) argues, these beliefs make Haudenosaunee reality different from many of the philosophical assumptions expressed in typical Western research methodologies that dismiss notions of spirituality, however do demonstrate expressions of relational thinking. As a settler, it would be inappropriate for me to claim that I have generated knowledge using Indigenous Ways of Knowing. How I approached this project is in the hopes of acknowledging the importance of Indigenous Ways of Knowing, and to begin to practice Two Eyed seeing - a concept that brings together Indigenous and Western worldviews to consider issues from multiple viewpoints, as I consulted the work of both Indigenous and Western authors. This framework was developed by Mi'kmaw Elder Albert Marshall of the Eskasoni First Nation who describes Two-Eyed Seeing as "to see from one eye with the strengths of Indigenous ways of knowing, and to see from the other eye with the strengths of Western ways of knowing, and to use both of these eyes together" (Bartlett et al., 2012). The guiding principles of Two Eyed seeing include the 4Rs: Responsibility, which privileges Indigenous values and voices and support Indigenous Peoples' right to self-determination; Reciprocity - whereby actions should benefit all partners, with a focus on colearning or learning together; Respect - which creates an environment that is empowering of Indigenous perspectives, promoting cultural safety; and Relevance - whereby initiatives should align with community-identified goals and needs (Ibid). Kimmerer has stated that she thinks of “Indigenous knowledge and Western science both as powerful intellectual traditions, which grow from different worldviews, but can both illuminate the nature of the living world and how

we might better care for it," (Aschaiek, 2021), and that she thinks that "our capacity to achieve sustainability and a more positive relations with the natural world is strengthened when we use both," (Ibid). I want to acknowledge that I have much to learn in this area, but that this research has served as a vehicle to begin my journey.

Relationality and Relational Accountability

My relationship to how I conduct research has changed throughout the process of this study, with my focus being on the relationships that I have built with my participants and with how I see the work that I do as an urban land steward. I believe that the interviews that I have conducted have strengthened and changed the nature of my relationships - as Lima, in her "Introducing Relationality to Design Research," (2021) suggests, my relationship with the knowledge that has been generated also extends to my relationship within my community of land stewards, and my relationship with the land that I steward. When it comes to relational accountability, from the onset, I set a commitment to myself to ensure that what is produced through this research is for the improvement and increased access to land stewardship: that it is for the benefit of the work that is done by land stewardship programs, and the positive impact that they can have. I value my relationships with all of those who were generous to be involved and as such hope that everything that is produced is for the benefit of my localized community. Like Lima, I want to emphasize that the process of research, whether it is fieldwork in the form of workshops, or conversations in the form of interviews, is collaborative, and that what I have produced is the result of relationships that I have developed.

What Brings Me Here

If you have lived in Southern Ontario and have experienced a summer in Toronto, you will know how unbearably humid it can sometimes be, but also, how unbearably dry. In taking care of our plot of land, the team of volunteers and I take turns, often in pairs but sometimes alone, to visit the patch to water, while juggling numerous other daily obligations. Even though it requires a commitment of time that I sometimes need to jigsaw it into my schedule, I love my time at the garden. Last summer, during a particularly dry period, some of the volunteers, including me, were visiting the garden in the morning, prior to work. It was particularly important because we had been transplanting patches of plants throughout the summer months, which need additional support at these early stages. One morning, around 6:00 am, I hopped on my bike and made my way Westbound towards the garden, ready to water for about an hour, to make sure that the new transplant could be supported. The simplest way of cycling there requires that I cross the Humber River using the aptly named Over Humber River Bridge. Although this sounds like a very average commute to a hobby that I enjoy, a couple of things took place that made me very aware of the impact that this work was having on me.

First, the awakening of the Humber River, stirring and steaming like a giant breathing organism. Cool, thick air was rising and steaming as it met warming temperatures on its way up, billowing up around the bridge, the greenery of the deciduous and evergreen trees almost

overwhelming. The scent of damp earth rises, mingling with the sweetness of mulch and new undergrowth. The sounds of the birds awakening, many of them here temporarily, as the area is a major migratory spot for hundreds of species. As time goes on, their songs get louder and louder. Even though I cannot see them, I imagine the forest and the waters teeming with other wildlife as well. The feeling was quite transformative, as I thought about how many creatures call the urban city home.

What this experience also did was help me to think about the history of the land. There is evidence of human occupation in the Humber watershed going back to 12,000 years, and between 7000 BC and 1000 BC, seasonal settlements existed, and those settlements show the first evidence of trade with goods flowing between the Arctic and the Gulf of Mexico with Ontario Petroglyphs have been dated to this period. In about 1000 BC, agriculture was introduced with corn, beans and squash cultivated by the Indigenous People who have been stewarding the land for millennia back (Mount Dennis Community Association, n.d). This very brief encounter with nature provided me with the opportunity to connect with my surroundings and myself in a completely unique way - beyond the physical benefits of being out in nature, I was able to make a connection with the land I was on in a completely different way, recognizing and acknowledging the people that came before, and all of the work that had gone into taking care of the land so that we today could benefit from it. What I am inspired to do is explore how we can continue to protect this land so that future generations can also enjoy connection to the land.

In this paper, I bring together the following:

1. A cross disciplinary literature review to provide background on Urban Land Stewardship as a concept, explores its numerous benefits through and to stewards, explores how it fits into a neoliberal framework in late stage capitalism, and looks at marginalization within this space, in hopes of framing current systems and moving into the future.
2. Insights generated from semi-structured interviews as well as a desire-based, Three-Horizons workshop involving current urban land stewards contributing to a vision of what the future of Urban Land Stewardship could look like.
3. Findings and recommendations for how we could get there, largely emerging from the data.
4. Foresight methodologies, including a Three-Horizons and Causal Layer Analysis visualizing present and desired futures
5. Autoethnographic reflection throughout, as I was also a research participant that contributed data in the interviews and reflected regularly in the form of reflections throughout the process, capturing my embedded experience.

Audience

The audience for this work includes those that are involved in urban land stewardship: organizers and coordinators working at NGOs, organizers developing grassroots, or DIY projects separate from any formal organizational support, and individuals that are interested in contributing to this space. My hopes are that these findings might help your considerations when it comes to program or service development, whether formal or informal.

Approaches to Research: Paradigm, Epistemologies, Ontologies, and Axiology

a. **Research Paradigm for Strategy of Inquiry**
   My approach to the research is shaped by the work of Wilson's *Research is Ceremony* (2016). In building my research paradigm, I am aligning with interpretivism as well as Wilson's Indigenous Research Paradigm or decolonized research approach. Interpretivism allows for the belief in multiple constructed realities based on the social contexts that create them - these realities vary in nature and are time and contexts bound rather than being universal truths (Budd, 2001). In shaping my methodologies, I attempted to use decolonial research methods that are based on relationality and relationship building rather than extractive or transactional approaches, with the relationships with my participants being at the forefront.

b. **Ontology and epistemology:**
   Informed by the work Leitão, my research approach believes that there are multiple constructed and holistic realities that overlap, rather than a single, universal reality. This also aligns with a relational research paradigm: the reality of the subject is in the relationship between myself, the participants, and the land that is being stewarded - the phenomenon that is being experienced. My research approach respects that the researcher and the participant influence one another, and that the knowledge that emerges is context and relationship bound, and that both the "researcher" and the participant are changed by the experience. In integrating a decolonial research paradigm, the process of relationship building becomes paramount. The knowledge that emerges is built upon the relationship between everything around us, including interpersonal, intrapersonal, environmental and spiritual relationships.

c. **Axiology:**
   My paradigm's axiology is built on relational accountability - with my actions being driven by the deep interconnectedness with others involved in the process, the communities, and the environment, emphasizing empathy, trust, and mutual respect. I hope to foster growth and understanding. The focus is not on values like "right" or "wrong," but instead on filling the commitments that I am made when I embarked on this research, and being accountable to all of the participants, for example, in reporting data in a way that is aggregated rather than using quotations, so that privacy, and the

time that we spent conversing can be respected . The interpretation will be respectful to the participants, with a commitment to the methodology and impact/usefulness of the results to the participating community. The approach was non-hierarchical, sharing power within the building of the relationship, with reciprocity at its centre, and in many ways, due to the auto-ethnographic components, I was as much a participant in the process.

Background

I feel fortunate that I have found my place within the space of urban land stewardship, and I want to acknowledge that my positionality affords me the luxury of fitting into this space with ease. I am also aware that not everyone has access to green space in the same way that I have, and that environmental injustice permeates cities, making green spaces difficult to reach for many. In Toronto, there is a demonstrated uneven distribution of what are often referred to as “environmental amenities” - tree canopy, public parkland, recreational parks, and community gardens, and Campbell et al. (2021) and many others allude to the numerous, neoliberal inspired and divisive processes often involved in providing this “infrastructure.” Just because cities are moving towards sustainability and greening, does not mean that they are necessarily doing so in ways that are equitable or socially just. Shell et al. (2020) state that environmental justice is equal access to environmental services and protection from disservices wherever people are living, while Scott and Conway (2020) demonstrate that racialized and poor communities have less access to canopy cover, parks, and opportunities to participate in land stewardship programs in their localized vicinity. Because of a lack of proximity, it can also be argued that racialized and poor communities may also have less access to urban stewardship programs and opportunities as well, although some organizations make it a priority to work directly within these areas.

There is no real question about whether environmental injustices exist in a large metropolitan city like Toronto. Trees and urban forests aren’t just pretty—they’re essential, and not just for helping to mitigate climate change, but also to improve people’s health and mitigate stress levels. But research shows that many policies—while promoting stewardship—are shaped by a neoliberal mindset, emphasizing economic value and entrepreneurial approaches rather than broader social or ecological goals (Scott and Conway, 2020). Additionally, cities, including Toronto, are filled with land stewardship programs, often run by citizens in collaboration with civic and non-governmental organizations, to help protect and preserve our green space, and for a variety of other reasons as well. Because of my belief that these programs are so beneficial beyond their role in environmental protection, I am asking to what extent current programs truly foster community care and equity, and how we can shape them to ensure that they are not simply reinforcing existing systems.

Defining Urban Land Stewardship

Environmental stewardship does not have a common, widely shared definition even though it touches a wide array of activities (Romolini et al., 2012). The authors argue that Aldo Leopold, in the 1940s, spoke of environmental stewardship as the "commitment of a person to the land, where land has broad, natural, place-based connotations, and that it manifested through "land ethic," which became the basis for discussions surrounding environmental stewardship. The authors also state that it is now a "wide ranging notion," and in contemporary scholarship, it can be referred to as "an ethic, a tool, a result, or a goal, with little being done to synthesize or categorize environmental stewardship types or components." In looking at extensive literature of land stewardship, Romolini et al., have emphasized four emerging themes around the characteristics or qualities of environmental stewardship as found in the literature, which includes:

a. The assertion of an ethic or responsibility at a societal scale, which includes respect and humility.
b. Motivation for stewardship can be highly personal as individuals.
c. Action on the land entails collaborative processes involving numerous actors ranging from individuals to institutions.
d. Outcomes vary and are multiple.

Urban land stewardship can occur across the entire urban landscape and on both public and private land. Here, it refers to the effort of individuals or organizations volunteering/working to help steward, protect, and care for the land/living ecosystem/being. This can take place on public or private land, and generally on land that is not owned by that participant. This is in line with the work of Bennett et al., (2018), who define environmental stewardship as the actions that are taken by "individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts."

Urban land stewardship can take a multitude of forms including:

- Tree planting and care: This could take the form of participating in local initiatives that involve planting native trees and increasing the tree canopy, which then helps to increase green corridors, biodiversity, and to contribute to the mitigation of climate change.
- Community gardening (food and native plants) and Habitat Creation: This involves engaging in community planting to support pollinators through the planting of native plants, growing food for oneself and the community, and using land responsibly by planting plants that aid/support aging infrastructures.
- Water and waste management: this could include active minimizing of waste through recycling/composting/reducing consumption and encouraging others to reduce as well,

installing features that collect water, planting bioswales, using various techniques to reduce storm water runoff.
- Clean-ups and monitoring: garbage clean-ups, removing invasive species, monitoring local ecosystems and reporting them. (Scott and Tenneti, 2024).

In a broader sense, urban land stewardship has referred to additional diverse actions including creating protected areas, replanting trees, limiting harvests, reducing harmful activities or pollution, and restoring degraded areas (Bennett et al., 2018).

Defining Collective Care

The health of the land impacts everyone who lives on it. Those who engage in urban land stewardship are helping to ensure that not just they are impacted by the benefits of their work, rather, every creature that is relying on the land, human or otherwise, is impacted as well. When urban land stewards commit to organizing stewardship, there are impacts that go beyond those felt by those stewards in their actions. The Care Collective (2021), in their manifesto outlines collective care acknowledging our mutual dependencies and intrinsic values of all living creatures, referring back to the work of Joan Tronto, who has emphasized that "caring with, or caring together, refers to how to mobilize politically in order to transform our world. Wrigley et al. (2024) define that the practice of collective care is highly political work that works to organize social change and contributes to collective survival. For the purposes of the work that follows, collective care is defined as shared responsibilities among individuals and communities to care for the land we all collectively live and rely on.

Literature Review

Western approaches to scholarship rely always on the traditional literature review, which I have been trained to do. Shawn Wilson, in his *Research is Ceremony,* speaks about Western versus Indigenous approaches to the literature review. In the Western tradition, the literature review can be seen as the culturally relevant way to communicate with academics in the traditional system. In the decolonizing approach, one can use a non-critical, relational approach that can build on the work of others, forming the context of relational accountability, in working from a decolonizing perspective (Wilson, 2016), and it is this approach that I am attempting to use. Rather than focusing on criticism, I am attempting to use an interdisciplinary approach, through an examination of literature published within human geography/city studies, environmental studies, law, and even psychology. In addition to traditional sources, I am also looking at grey literature from perspectives that may not have been included in academic work in the past.

a. The Role of Urban Land Stewardship and Stewards: Impact and Motivations

Urban land stewardship practices are taken up by individuals as well as diverse civic groups with varying direct foci, and across various ecological sites that include green spaces, but also joint resources such as air and soil (Svendsen and Campbell, 2008; Campbell et al., 2021). Numerous studies have shown that although thought of as marginal in terms of their environmental impact, and in comparison, to their governmental counterparts, these civic groups may actually be more impactful, and beyond their ecological work (Metcalf et al., 2016; Rigolon and Gibson, 2021). Campbell et al. (2021) found that civic stewardship groups have the ability shape and transform urban environments, not just physically, but politically and discursively as well, and argue that greater attention is needed to the role and impact of civic actors as stewards who engage in acts of caretaking and claims-making on urban sites and the public realm in pursuit of sustainability and environmental justice (Andersson et al., 2014; Bennett et al., 2018; and Buijs et al., 2016).

Large scale and small-scale stewardship groups are described as generating programs, everyday activities that can create shared expectations and trust, can foster social networks, and can also help in many instances to help with preexisting inequalities (Campbell et al., 2021; Small, 2009; Connolly et al., 2013). Campbell et al. also found that stewardship actions are often motivated by the impulse to bring communities together, a way to care for nature outside one's own doorway, and to connect with strangers and community through shared work, but also socializing, and stewardship groups can contribute a crucial role to maintaining green spaces but also activating them, amplifying their potential for engagement and inclusion. In writing about public physical spaces, Campbell et al. argue that these public spaces, including spaces that stewards maintain, need to be enlivened by individuals, groups, organizations, to create opportunities for people to feel like they are part of collective life, and it should be remembered that these spaces are supported by the politics of public space and the members of the community that support them (Bodnar, 2015). Campbell et al. call the environmental stewards, that aim to improve community quality of life through the stewarding of these green spaces serve as "transformative agents" that create both social and ecological outcomes, working alongside various actors, including governmental and non-governmental organizations, stewards, and stewardship groups can play a big role in maintenance, advocacy, and activation, moving beyond the role of environmental stewardship.

Resulting from a multitude of reasons including the mitigation of climate change, municipal priorities are changing, and there is a moving away from the idea of the sanitary or hygienic city towards that of a sustainable one, but this is no way the realm of municipal organizations and infrastructure alone. Civic groups and civically engaged citizens, often volunteers that carry out the work of stewarding urban lands, as Campbell et al. (2021). argue, are more than just a labor force: they help to envision and shape the public realm and are part of the environmental governance networks of most major cities, including Toronto. They often work alongside governmental entities, non-governmental, and private sector actors to advocate for, maintain, and steward shared urban land.

In their conceptual review and analytical framework for environmental stewardship, Bennett et al. (2018) describe that stewardship can be carried out by individuals, groups, or networks of actors working together. Although it can be carried out individually, stewardship is often conducted collectively by groups or communities for bigger impact to manage common-pool resources. What actors are involved and on what scale and complexity is required. Bennett et al. (2018) argues that stewardship actions involve extensive networks involving individuals, public agencies, civil society organizations, funding bodies, NGOs, as well as localized community groups. They emphasize that it cannot be assumed that local actors have the motivation or capacity to commit to stewardship actions, as it is a phenomenon that is dependent on intrinsic and extrinsic motivations that vary case by case.

When it comes to motivations, most scholars recognize that motivation for stewardship can be personal and go beyond environmental protection and remediation, as individuals can be more compelled by more direct expectations and realizations (Romolini et al., 2012). The authors argue that individuals can be compelled by a personal connection to a space or system that is in decline, neglect, or that is threatened. Others argue that motivations can include personal benefits such as meaning or realization of passion (Romolini et. al., 2012; Grese et al. 2000, Svendsen 2009), and that positive outcomes can affirm, then strengthen initial motivations (Romolini et. al., 2012). Bennett et al. argue that land stewardship holds both intrinsic and extrinsic motivations. Intrinsic motivations bring personal pleasure or satisfaction, brought about by needs such as self-acceptance, competence/confidence, a sense of autonomy or empowerment, well-being and belonging (Ryan and Deci 2000; Tabernero and Hernández 2011). Bennett et al., also argue that there are two categories of intrinsic motivations: (a) underlying ethics, morals, values and beliefs and (b) a need for self-determination or self-actualization. Extrinsic motivation can include external motivations such as social reinforcements and economic benefits.

Dearborn and Kark (2010) cite multiple motivations for the preservation of urban biodiversity and habitats, and the role of citizens in doing so. The authors argue that cities can help preserve local species and act as “stepping stones” that connect habitats beyond urban areas, and protecting biodiversity through protecting habitat that include green spaces, environmental challenges including climate change, rising temperatures, and pollution can be mitigated. They also argue that urban green spaces offer great opportunities for environmental education, hands-on activities like citizen science, and teaching conservation ethics and improving climate resilience right where people are living. Beyond practical benefits, exposure to nature in cities boosts mental health and well-being, making urban biodiversity not just an ecological priority but an ethical and social one as well.

b. Urban land stewardship and neoliberal frameworks

Harvey (2007) defined neoliberalism as “a political economic philosophy that asserts the primacy of the market in attending to human needs and wellbeing, and re-orients the state towards the facilitation of market mechanisms.” Growing out of the 1980s, neoliberalism

promotes reductions in public spending and dismantling of public programs and the privatization of common resources (Peck and Tickell 2002), and has changed how we relate to one another, with a profound shift in the understanding of the relationship between the individual and the collective (Blakely, 2021). Ghose and Pettygrove argue that stewardship programs such as community gardens fit into the neoliberal framework, as the they require extracting material and labor resources from already resource-poor citizens, who struggle to fulfil basic survival needs, while Holt-Giménez and Shattuck (2011) argue that stewardship programs cannot fix a health gap if not accompanied by changes in the structures of ownership and reversal of the diminished political and economic power of those who are vulnerable in the urban fabric.

Numerous scholars (Ogawa, 2009; Jermé and Wakefield, 2014; Barron, 2016; and McClintock, 2014) have conducted and written about urban stewardship programs using the lens of neoliberal analysis, usually within the context of community gardens, as these can produce food and therefore have the ability to assuage food deserts. These spaces are often framed with market-oriented ideologies, as well as within the individual/citizen's responsibility to maintain them. While community gardens or other urban stewardship initiatives can provide important social, environmental, and health benefits, a neoliberal lens may emphasise their role in promoting self-reliance and reducing public welfare spending rather than addressing systemic inequalities within given areas (McClintock, 2014). In this context, municipal support for community gardens or other land stewardship projects might focus on their potential to revitalize neighborhoods, increase property values, or attract tourism, rather than on the broader need for equitable access to green spaces and healthy food. Some scholars indicate that the burden of maintaining these gardens/spaces often falls on volunteers, which can obscure the need for more comprehensive public investment in urban green spaces. As numerous scholars have critically examined how urban land stewardship programs can be co-opted into neoliberal agendas of municipalities, potentially neglecting their role in fostering community empowerment and challenging structural inequities (Ogawa, 2009; Jermé and Wakefield, 2014).

Ogawa (2009) brings to light that stewardship programs such as community gardens are a patchwork approach to address environmental injustices or lack of access because they do not directly tackle structural issues of poverty and inequality. Barron (2016) and McClintock (2014), in the context of community gardens as land stewardship argue that those that simply apply a neoliberal lens miss the complexity of the issue of land stewardship: that land stewardship can be both a countermovement and a political act. Steinburg, while looking at land stewardship as a countermovement, also shows how this transformative potential can be co-opted back into the discourse of neoliberalism, as organizations and urban officials assign specific uses to it, leading to exclusionary access, reducing the likelihood of transformative action. There is also the question of devolution coined by Barron (2016), referring to the practice of various levels of government offloading regulatory responsibility to local governments, and local governments in turn offloading responsibility for social welfare to community groups and volunteers, and states that citizens should not passively accept this

responsibility of a shift from government to shared governance - the concern being that underfunded volunteer groups are being asked to support weakened networks of state social services, and deliver services and entitlements that once were provided by the government.

c. The impact of land stewardship programs and marginalization

Not everyone has the same access to green space, and hence may not have the same access and benefits to urban land stewardship opportunities. Scott argues that planting trees is one of the easiest ways to improve the environment in the city and to reduce the negative impact of the climate crisis, however, research shows that racialized and poor communities have less access to canopy cover, parks, and opportunities to participate in land stewardship programs in their localized vicinity (Conway and Scott, 2020). This absence of access to the layers of inequality of folks living in the city's margins. The authors also argue that tree planting/urban stewardship by non-profit groups are also less likely to occur in poor Black neighbourhoods, and home-owners, who are more likely to be white, tend to plant more trees on their property compared to renters, who are more likely to be Black or racialized. As trees and greenery improve property values, fewer trees/stewardship of nature tends to lower the economic base and desirability of racialized neighborhoods. Smith also argues that tree planting or stewardship may be reinforcing settler colonialism, as it may be taking place on contested or stolen land, and stewardship programs, based on their participants, may also reinforce the idea that environmentalism is a White space and activity, where racialized people may be seen as out of place (Ibid).

In 2024, Scott and Tenneti conducted an autoethnographic study based on their experiences in nature stewardship programs. This study uses analyses of personal experiences of the authors, two black volunteers in the context of a predominantly white setting, as a window for the political and socio-cultural norms and expectations of a society, decisions made by people and organizations reflect power dynamics between and among stakeholders, impacting who gets to volunteer and the quality of their experience, using journaling, photography, blog posts, conversations and observations, and memory work for analysis. They state that although stewardship programs are usually designed from an egalitarian point of view - based on assumption that those participating in the programs are equals, this masks potential inequities and potentially encourages a colour blind approach, further obscuring how racialization and racism operate in urban nature stewardships and more broadly, environmentalism. They present that race is just one layer of the experience with gender, class, language, immigration status and citizenship cooperate at the same time to shape the lives and experiences of Black and other racialized women. The authors emphasize that Canada continues to be a nation with an existent racial hierarchy which is reflected in environmentalism, including in urban stewardship programs.

Jafri (2009) looked at three organizational projects focused on urban land stewardship: Greenest City's Multicultural Greening Program, the Toronto and Region Conservation

Authority's Community Development for Multicultural Environmental Stewardship Project, and the Evergreen Foundation's Urban Oasis Project. Jafri found that an issue common to the three organizations looked at, is a preference for frameworks based on diversity or multiculturalism, as opposed to anti-racism, and argues that by focusing on multiculturalism, or the focus on cultural difference as the primary gap in limiting the participation of people of colour in the environmental movement, systems of power and privilege that create these exclusions get obscured. Focus on diversity is passive and does nothing to challenge the status quo, which is the opposite of the activism of anti-racism initiatives. Newman (2011), after observing a public consultation on urban restoration in high park where all of 70 people present were all white in a city where 50% of people are immigrants, or people of color. Although Toronto is a city of diversity, with almost 49 percent of residents born outside of Canada (Statistics Canada 2003), the City of Toronto Parks, Forestry and Recreation Department estimates that less than 10 percent of volunteer participants working on ecological restoration projects with the City of Toronto are from culturally diverse populations. Additionally, according to Statistics Canada, more than 40 percent of new or recent immigrants to Canada volunteer in their community, while only 2 percent volunteer for environmental organizations Urban restoration provides numerous obvious benefits both to the restoration project as well as to the greater community at large, including linking newcomers to the landscape of their adopted neighborhood and creating/strengthening relationships and networks that empower other local community development projects. Newman argues that involving racialized communities in the planning, implementation, and monitoring of ecological restoration projects brings new perspectives, diverse experiences, and varied strategies.

Schell et al. (2020) review how systemic racist practices including residential segregation, resulting in redlining has led to unequal distribution of nature in cities and continues to play out in ecological processes impacting everyone located in cities. The authors argue that systemic inequities have profound changes on biodiversity and biological changes and loss, remarking on the balance that can negatively impact inhabitants (including nature). The authors indicate that decisions related to urban resource management are often dictated by a subset of individuals and institutions with social or economic capital and can bias how "environmental benefits" get distributed within cities. The authors amplify that white-led environmental and climate movements have long marginalized issues of racial justice when it comes to impactful policy and legislation and disregard structural/system violence, preventing ecocultural relations with urban ecosystems. Additionally, the authors emphasize that "Black, Indigenous, Latinx, and immigrant communities possess cultural knowledge, ongoing land and water relations, and effective practices for community and ecological revitalization, honed through generations of struggle with and for the land."

A report by Scott and Tenneti for Nature Canada (2021), based on an expressed desire to help address the complex barriers to nature and nature-based programming experienced by racialized communities to find solutions that seek to better engage racialized communities and create a more equitable access to nature. It reports on the cultural and psychological barriers

to nature experienced by young racialized people and provides recommendations for action to address these barriers with recommendations being applicable beyond the scope of the organization itself. Various studies show that living in cities makes children and youth, due to the potential disconnection with nature, less likely to understand the relationships between urbanization, habitat loss and species decline (Miller 2005, Soga and Gaston 2016) - Additionally, there is evidence that childhood interactions with nature and the resultant memories shape our attitudes and behavior towards the environment, and some scholars/pedagogues argue that environmental education programs to shift from cognition to the psyche, where making an emotional connection with nature is given precedence over cognitive knowledge of nature (2013). The authors of this report argue that Black youth have a more complicated relationship to nature compared to other youth of color. This relationship is undergirded by slavery and its after-life and resulting from the Canadian nationalist imagination of being the land of the Great Outdoors or the Great White North (Scott and Tenneti, 2021). These associations and its typically paired image are connected to three assumptions. The first is that nature of Canada is pristine and free of people, which erases Indigenous people, their ownership of the land, and their ongoing struggles to reclaim it, (Tuck & Yang 2012). National and provincial parks were created to protect nature, and the first step in the process was to remove Indigenous people from their land (Thorpe 2012). Second, the myth that nature is seen as neutral or a transparent space that is open to everyone (McKittrick 2006). Seeing nature in this way hides how race shapes who nature benefits and who is considered best suited to be in that space (Finney 2014), and third - the absence of Black people in environmentalism in Canada continues the erasure of Black people from the history of the country (Scott and Tenneti, 2021). The under-representation of people of color in environmentalism and in the nature sector is the key thread that runs through the recommendations of this report.

Research Questions

This research study wishes to explore two main research questions, with several subquestions.

1. **How can those involved in urban land stewardship collaboratively design pathways that amplify its benefits, and nurture trust, reciprocity, and shared responsibility among all actors?**

    a. Are there ways that urban land stewardship practices can strengthen connections and mutual care within communities?

    b. How can we cultivate anti-colonial relationships to the land that centre respect, dialogue, and long-term partnership among people and and in relationship to the ecosystem/environment?

The sub-questions for the first primary question further explore how urban stewardship programs reflect or resist neoliberal approaches, and how they can emerge as spaces of

resistance through the prioritization of collective care, relationship building, and relational accountability. In addition to this, as urban land stewardship programs relate to the land, it is also important to explore how these approaches amplify colonial approaches and how these can be challenged. In addition, it is an exploration of the numerous barriers that may limit access to participation for all, and how these can be potentially addressed.

2. **How can we leverage pathways to foster resilience and build mutual aid in the space of urban land stewardship, while building inclusionary practices?**

This question also asks for the exploration of how urban land stewardship programs make contributions towards social justice, fostering resilience, building community and mutual on a grounding of ecological care.

Methodology

When deciding on my methodologies, I used those that I believed would leave both the participant and myself, the researcher, in an altered state: the process itself was a sort of knowledge creation, with time and context also influencing the emerging insights. The methodologies used are meant to be non-hierarchical. In my mind, an interview is not an "Interview," but a focused conversation that allows for the collection of information directly from the point of view of the participant, and where I can learn more about the participant that is also of interest and concern to those that I am "interviewing" or speaking with people who might be in some way affected by the analysis. I hope to both learn but also to build accountable relationships with those from whom I am learning.

Influenced by the work of Lesley-Ann Noel and Jananda Lima, my methodology is guided by relational accountability and uses respect, reciprocity, and responsibility in building relationships with participants and contributors. My methods have been shaped by considering:

- how they build respectful relationships between participants
- how they help me relate respectfully to the other participants involved in this research so that together we can form a stronger relationship with the ideas that we will share
- how will they help me support my role as researcher in this relationship specifically when it comes to my responsibilities

Methodological Approach

Participatory Community Based Research

In my approach to my methodology, I committed to Participant Community Based Research, by including members of the communities affected by the research in the process. PCBR

aligns particularly well with the Indigenous Research Paradigm, as it seeks to understand the world by trying to change it, collaboratively and following reflection, for better, for those that are most impacted, within the limits of the institutional REB approval. The three main tenets of Participatory Action Research (PAR) include participation (life/existence and participating in society, and in particular, in a democracy), action (engagement with experiences), and research (including soundness in thought and growth of knowledge). PAR a pluralistic orientation to knowledge making and social change. Community-based research is defined as 'research with a substantial level of community participation for the purposes of community improvement and social change' (Wakefield et al., 2007). As such, I purposely included a participant group that was part of the land stewardship community and with the intention of localized improvement.

Desire-based Research and Facilitation

In designing the strategic inquiry, I am also looking to the work of Renata Leitão and adrienne maree brown. Leitão argues that in solutioning, if we focus on needs and not desires, then we are looking to tweak the existing world rather than to create the world that we want to live in. The author states that the negative impulse toward action, which arises out of need, "is completely different from the positive impulse born out of the desire to create situations, systems of organizations, or concrete artefacts that enhance our life experiences." This statement shapes the methodologies used in this MRP to include desire-based questions: what we want to see versus what we need to see. In reporting the lived experiences of participants, strengths-based approaches and a perspective that highlights self-organization and community mobilization as a narrative is used.

Emergent Strategy

The approach that I used for this research leaned heavily on the work of adrianne marie brown's *Emergent Strategy* and *Holding Change*. Emergent strategy is a method whereby which the designer can engage with a design challenge, for example, in service design, and where there is an expectation to yourself, as a designer, to be changed in the process, along the lines of methodologies, assumptions, or design developments, in hopes of leading to transformation and growth (Haider, 2022; brown, 2021). In approaching the methodological design, I wanted to integrate approaches used in holding change, to facilitate movement towards social justice and change. In particular, this approach will be a step towards making it easier to help participants, including myself, to understand the culture we are trying to create, and give us a place to practice doing so, helping us to understand our desires and visions, giving us space to tell our stories, and seeing how our visions can manifest.

Autoethnography:

Ethnography is a methodology that does not set out to test a hypothesis, but is instead exploratory in nature, facilitating and inductive or iterative, and is usually thick in description. It is also associated with the researcher, in this case myself, with the local context being studied (Reeves, S., Peller, J., Goldman, J., & Kitto, S., 2013). In the case of this study, the approach is autoethnographic, as I put myself under the ethnographic gaze, with reflection throughout in

the form of autoethnographic memoir: in reflecting on my personal experiences as an urban land steward, I have also reflected on my experiences, some going back to childhood (Reed-Danahay, D., 2019). The focus of the methodologies will be on personal narratives and storytelling and its analysis, in the context of relationship building (Wilson, 2016). To build relational accountability, it was really important for me to focus on qualitative approaches in my data collection. The data is reported in more of an aggregated way, as confidentiality was also important. The data collected for this study used a mix-methods qualitative approach, using the following methodologies:

a. Semi-Structured Interviews

I used this approach to engage conversationally and directly with each participant, using open-ended questions as much as possible, following up with additional questions when needed, keeping conversations to about an hour to minimize both participant and interviewer fatigue. I chose this method because semi-structured interviews have some wonderful benefits, including increased likelihood of candid conversations, identifying the independent thoughts of each individual person in a specific participant group, as well as if the research that you are doing is more exploratory in nature, and you need latitude to identify emerging issues (Adams, 2015). I designed three separate interview schedules with open-ended questions, with some overlap, catering to participant type. With the exception of one, all interviews were conducted in under an hour, and with the exception of two, remotely. In addition to exploring their thoughts on and experiences with urban land stewardship, they also focused on the desires that the participants held - what their wants versus what their needs were for urban land stewardship programs.

Participants

A total of 11 participants were interviewed throughout the research data gathering process that fit into three categories that were actively sought. These included:

Experts:

- This included people who were employed or had/have careers in urban land stewardship or related programs.
- Please note that there was overlap in terms of those who are considered members of the public interested in land stewardship programs, as some folks here also happened to work in the area of urban land stewardship.

Volunteers:

- Those people who are actively volunteering in an urban stewardship program and are directly affiliated with the same program that the researcher volunteers for.

Members of the general public:

- Those who are interested in urban land stewardship and who may or may not have been directly involved in a program.

b. Workshop - Ideation of Desired Futures

The two-hour workshop was an opportunity to jointly explore nature-based futures that support wellbeing and collective care in the context of urban land stewardship programs. By taking part in these activities, the participants worked together towards potential transformative change through a richer and more connected understanding of their desired future in their volunteer work. The goal of the workshop was to exercise collective imagination to help us to collectively identify elements of alternatives in the present, and pathways towards desired futures, and was inspired by the work of Renata Leitão (2020), and her pluriverse, desire-based design, as well as Egmose et al.'s Critical Utopian Action Research, a methodology that emphasizes the interplay of critical analysis, imaginative thinking, and everyday life based actions, all working towards societal democratization (2020). The emphasis throughout was on desire, not need, as Leitão emphasizes that when we design from need, we are tweaking the existing world rather than creating the world that we want to live in, and this is completely different from the positive impulse of desire-based design, whereby a positive impulse born out of the desire to create situations, systems of organizations, or concrete artefacts that enhance our life experiences," while CUAR asks us "How do we really want to live, and how should we live? Not just survive; but really live?"

The workshop consisted of an activity of creative writing or drawing, or of the participant's choosing, as creative activities allowed us to express our ideas visually and through storytelling, and in hopes of surfacing thoughts that may not emerge verbally through interviews or even discussions. The prompt given included writing yourself a postcard/reflection/letter or create a drawing from the future, specifically about your work and involvement with urban land stewardship in 2035. Some prompting questions that were used included, and which align with the Three Horizons (foresight tools) line of questioning. Please see Appendix A for the workshop schedule.

Participants:

The participants consisted of a group of volunteers who are actively volunteering together at an Urban Land Stewardship program. There was a total of four volunteers plus myself, the researcher, who was contributing ideas throughout as a participant as well.

The volunteers were recruited via email through my direct network, as they are my colleagues at the Urban Land Stewardship program that I volunteer at.

Notes on autoethnography:

This study includes auto-ethnographic components based on my experiences with urban land stewardship programs. While volunteering at this program over the Spring to Fall 2025, I would make regular journal notes about my own feelings regarding my emotional and physical state, as well as any ideas that were arising during my time on the way to, at, and on my way home from the experience. As a result, I technically qualified to be a participant within the "Volunteer" category and shared openly with others my reflections throughout the interviews. This data was also included and coded for analysis. An additional note is that whenever I was volunteering, I was quite conscious of the fact that I was both working on and taking part in the research process, which shaped at least some to the reflection.

Synthesis:

Data Preparation and Analysis:

The interview data was transcribed during the recording process and and was corrected for any spelling/grammatical mistakes before being sent to the participants, usually for a period of a week, for a chance for them to remove, add, or correct anything that was said during the interview, in hopes of accurately representing their thoughts, feelings, and experiences. Once the transcripts were returned to me and sections of the transcripts removed or added, I re-read each transcript before loading it into NVIVO - a software that helped me to organize, manage, code, and analyze unstructured data so that I could arrive at a series of findings that led to the development of recommendations using foresight tools including the Three Horizons and the Causal Layer Analysis.

I decided to use Braun and Clarke's Six Step Thematic analysis, as it is a method used to identify and interpret patterns or themes in qualitative data that often leads to new insights and understanding, helping to interpret the information shared with me for inherent meaning. I found it useful as it is meant to serve as a roadmap to meticulously process qualitative data, hopefully enhancing the depth of research findings. The data synthesis went through a six step process that included:

- Familiarization with the data, where I could discern initial themes and important sections, viewpoints and patterns, and where I could highlight diverse perspectives that were coming to light.
- Generating initial codes, which included a close examination of data to identify recurring patterns/terms/visual elements, with emerging keywords that were meant to capture the real (reflecting lived experiences) and rich (reflecting the meaningful insights about the phenomenon) of participant experiences.
- Coding material including processing all transcripts step by step, segment by segment, to capture the data's core message, with codes symbolizes the salient, summative, and essence-capturing attribute, which helped me to identify various patterns and trends,

and to start to help me grasp a conceptual understanding of the underlying ideas or sentiments.
- Theme development included organizing codes into meaningful groups and moving towards a more abstract interpretation, and linking the findings to the research questions, and in many cases, constructing meaning
- This slow and systemic analysis of the data allowed for conceptualization, and slow thinking about the concepts, ideas and potential pathways merging from the data.
- I was then able to work with these concepts and compliment it with various secondary resources and theories to help me build out foresight analysis and suggest findings for each research question.

The synthesis of information includes the running of data through two foresight methodologies: Three Horizons and Causal Layer Analysis, and the development of key findings and recommendations.

Results

Please note that the findings are emerging from the data collected from interviews and the workshop, and whenever possible, are complimented by secondary resources or desk research.

Key Themes

Theme One - There are necessary systems changes that need to occur for Urban Land Stewardship thrive inclusively and combat scarcity myths

A major theme that emerged from both conversations with participants as well as much of the secondary research is the potential neoliberal and bureaucratic nature of some of the obstacles inherent in urban land stewardship, and some of the system changes that might need to occur to combat scarcity myths that often prevail. There are many actors involved in the space of Urban Land Stewardship, including individuals, non-governmental organizations, and governmental agencies, and they interact in a variety of ways. There are different individuals and configurations across various sized formal and informal organizations who are driving stewardship initiatives, and the various actors have different actual and desired rights, roles, and responsibilities (Bennett et al., 2018). Urban Land Stewards are affected by leverage points, meaning the policies, programs or market mechanisms that different organizations and actors—including governments, NGOs, interest groups, and local communities—promote and implement with the intention of enabling or developing environmental stewardship. External organizations have the ability to intervene to either promote or hinder desired outcomes, and knowing how to leverage these points can be vital (Ibid). It is important to be familiar with the characteristics and understand how they can be potentially leveraged to promote collective care and equitable access.

1.1 **Identifying and Averting Bureaucratic and Neoliberal Policies**

Urban land stewardship programs often face significant limitations due to municipal and provincial regulations, procedures, and oversight, with municipal agencies sometimes treating green spaces such as parks like infrastructure rather than ecosystems. Bureaucratic requirements create administrative burdens that can slow or obstruct the work individuals aim to carry out. For example, even though there are situations where the municipality gives permissions to urban land stewardship groups to maintain municipal land, they are limited in how they can act, what they can remove, often resulting in what may feel like fruitless work, where invasive species consistently return. To enhance participation and effectiveness, it is essential to explore strategies that minimize unnecessary oversight and allow for more autonomous stewardship activities. Some participants mentioned the challenges that can be encountered when involving municipalities, for example, the challenges and delays that one can encounter when applying for event permits. Others mentioned the comparable ease of working with providers directly, for example Indigenous artists or Elders, rather than go through a governmental/municipal body to carry out the work. Other participants indicated that they, as an individual citizen, find it difficult to participate in self-driven land stewardship because of various by-laws. Even something as simple as picking up the trash and disposing of it at a public garbage can incur a fine, depending on how much garbage has been collected, while getting a permit to run a similar but formal activity could be very time consuming.

There also needs to be an awareness of how urban land stewardship often emerges within the context of neoliberal policy frameworks that reorient the role of the state toward facilitating market mechanisms (McClintock, 2014). These policies frequently promote reductions in public spending, dismantle public programs that support urban land stewardship as responsibilities get passed down to citizens. It is also important to pay attention to funding models and to advocate for steady allocation rather than competitive grants that make it feel like urban land stewardship is a place of zero-sum competition: with various groups in competition with one another for resources, rather than working together to support collective care. As a result, stewardship initiatives may reflect broader systemic shifts in governance and resource management, raising critical questions about equity and access. When it comes to funding, numerous participants, both experts and those interested in urban land stewardship with extensive experience in professional land stewardship or adjacent fields indicated the importance of flexibility in deliverables. When interviewed, one expert indicated that “units do not tell the whole story,” when it comes to impact of land stewardship programs, and funders often desire quantitative results. It takes time to build deep relationships with volunteers, with community partners, with Elders in the community, and that these components are not transactional, as so much of our current capitalistic system supports. From the interviews, there is a general sense that reliable sources of funding are crucial, without which programs cannot be properly resourced, with the domino effect that experience depreciates for those who are attending. Support for upkeep is needed, and in many cases, it may fall to stewards to replace equipment or seek out resourcing, if necessary. Experts mentioned that when they

have the ability to support projects long-term, they are often most successful, and that is also when the volunteers feel valued and supported to continue their collective work.

Observation		Recommendation
There is an impression that parks and green spaces get treated like infrastructure rather than what they actually are: green spaces that are sustaining and critical to the wellbeing of all species that use them: living ecosystems that need to be cared for.	→	Continue to integrate decolonized views when it comes to ideas around land, advocating and showcasing our reciprocal connection, and value beyond units of amount of canopy cover generated.
Bureaucratic regulations can make it difficult to move in either direction - for example, picking up litter then putting it in a public trash bin (dumping fine) or the various necessary permits to run events, or to maintain green space (e.g. in the ravine system), remove invasive species (eg. Buckthorn).	→	There is a necessity to be familiar with regulations to identify what can and cannot be carried out, and with what ease. When municipal/provincial support is needed, time must be built in to ensure that protocols are followed. Working directly with involved parties rather than governing parties may ease this.
Working within the bounds of municipal government necessarily leads to slowdowns as permissions and permits are needed for everything.	→	Ensure that when needed, to allow for the right amount of time for processes - Knowledge is powerful: know where the limits and boundaries exist.
The ability to work directly with providers or partners is much smoother and easier in terms of relationship building and outcomes, rather than having to go through municipal processes.	→	Collaborate and connect with community members when possibly, building strength and abundance in connection.
When there is a partnership between an NGO and a municipality or agency of a municipality, depending on accountability, the approach can be characterized as neoliberal, as citizens are tasked with taking care of	→	Ensure that when possible, parties are compensated in an appropriate way. Understand that there is a nuance when it comes to the application of neoliberal frameworks: having agency over stewardship can lead to empowerment.

responsibilities that the municipality should care for.		
Citizens are often the driving force for positive change resulting in vigilance being needed from community groups or citizens to ensure that work is carried to protect the health of ecosystems and the biodiversity within municipalities - which really should be the role of the municipality. Citizens are the ones that are impacted day-to-day.	→	Whenever possible, advocate for more/appropriate support from the municipality and the province, rather than relying so heavily on the work and vigilance of citizens. It should be the responsibility of the municipalities should allocate dedicated resources, enforce environmental policies, and implement proactive monitoring systems to ensure ecological health, reducing the burden on community groups and individuals who are disproportionately impacted by environmental degradation
Even though grants are available through the municipality, it becomes the responsibility of regular citizens to apply for grants, and then carry out the work themselves with limited or no support from the granting body in the actual work itself.	→	Take advantage of municipal granting programs (eg. PollinateTO), ensuring that the monetary total needed is adequate. Advocate for additional support that helps to reassign the burden of grant application and project delivery/reporting to the municipality through proactive support for stewardship initiatives; Advocate for longer term supports (2-5 years versus just initial funding).

Table 1 - Observations and Recommendations for reducing bureaucracy

1.2 - Leveraging social connection to build commitment to urban land stewardship and to one another, combatting the myth of scarcity

In an increasingly polarized society, urban land stewardship provides a vital social connector, enabling participants to unite around shared goals and interests, whose impact actively contributes to collective care. These activities can foster networks of like-minded individuals, creating opportunities for mutual aid, reciprocity, and equitable relationships that often extend beyond the stewardship context. Volunteering not only strengthens community ties but also combats feelings of helplessness, empowering participants through collective action and shared responsibility. But just because they may have like-minded goals, does not mean that urban land stewards are homogenous in their characteristics. An expert that I spoke to emphasized the need for dignity and respect for all, while others emphasized the need to work directly with community organizations and community leaders - developing relationships and relational accountability, where everyone feels like they belong and have a space. A major insight that emerged is that it is in committing to relationships where you can combat myths of

scarcity. One expert spoke to the idea of various tropes that we are taught to believe: there's not enough funding, there's not enough time, there's not enough interest, there's not enough passion. He spoke to the fact that it's a matter of genuinely engaging with those communities, where suddenly you see that abundance - that there are people who are engaged: who want to do the work and to connect. Well established organizations need to have the humility to seek out smaller formal and informal groups and leverage their support - offering resourcing when possible, and if there is overlap, exploring opportunities for partnership and collaboration. Connections are forged through common goals and topics and can lead to longer term relationships that move beyond shared activity. Stronger connections build mutual aid and reciprocity between participants and communities, which results in abundance.

Observation		Recommendation
While many use urban land stewardship to express their love and commitment to nature, others use it as a catalyst that allows them to forge connections and networks with their community/"village"/"tribe."	→	The mission of the urban stewardship organization may differ from the priorities of those who want to volunteer for it. Emphasize the various benefits and be aware of the various priorities and motivations that volunteers may have to encourage participation.
Activities/programs can be used to forge connections and supports amongst participants resulting in deeper collaborations.	→	Seek out collaborations and connections with communities particular to the area where urban land stewardship work is being done, and beyond. Urban land stewardship and its outcomes (for example, food) acts as a point of interest for connection: love of plants, animals, the land as a connector to our humanity through relatable connections.
There is potential that if there is a greater the sense of community, the greater the commitment.	→	Organize to build community through various activations rather than simply focusing on potential environmental impact.
Helps to build out a sense of community and network of like minded people with the potential for mutual aid.	→	Emphasize the goals that everyone is working towards. Even though we are coming from different backgrounds, we are working towards the same end goal and likely have similar values.

Connecting more deeply with one another using urban land stewardship as a catalyst can potentially lead to deeper and longer relationships with one another seeping into other contexts.	→	Emphasize and plan for activities that can foster friendships and caring, as these relationships can build abundance in resourcing and mutual aid.
Idea of reciprocity - we nurture the plants, but then nature nurtures us as and others - those participating in urban land stewardship are putting in the effort, but they are also getting something out of it as well.	→	Ensure that there is reciprocity and appreciation for those working as stewards. Relationship building can lead to abundance.

Table 2 - Observations and Recommendations for leveraging social connection for commitment

Theme Two: A Needed Paradigm Shift - Unlearning anthropocentrism and connecting to Indigenous Ways of Knowing and relationality: recentering the human in nature

From the conversations held with experts, volunteers, and members of the public interested in urban land stewardship, a major theme emerging from the findings is that to co-create pathways that foster collective care, a paradigm shift needs to take place. This shift requires a return to the worldview of the original stewards of the land - the Indigenous people that have been protecting it for millennia. Shawn Wilson (2016) states that if "Indigenous ways of knowing have to be narrowed through one particular lens (which it certainly does not), then surely that lens would be relationality." Indigenous worldviews stress the importance of relationality or relationships and are built upon interconnectedness and interrelationships that bind all of us together. For Indigenous peoples, the basis of relationality is their connection to the land, to their ancestors, to future generations - rather than being in relationship to other people or things, Indigenous worldviews hold that we are the relationships that we hold and are part of. Building collective care and equity within urban stewardship programs means re-examining colonial relationships with the land. This can also foster a greater understanding of current environmental injustices taking place, as it helps us to reflect on the colonial hierarchical structures both in the past and present. Conversations with experts working at urban land stewardship organizations indicated that there is a desire for and a commitment to this work, while volunteer and non-volunteer participants also indicated a need for a shift in our thinking when it comes to how we see ourselves within nature to better connect to it. Even though urban land stewardship programs have traditionally had the potential to mask and further obscure how racialization and racism operate within environmentalism (Scott and Tenneti, 2024), they can also play a role in shifting/changing the currently held colonial relationships with the land.

Findings:

2.1 Gaining a greater understanding of the land and its history through Indigenous Ways of Knowing and Relationality

Committing to learn from Elders and Indigenous peoples about the history and meaning of the land addresses a critical gap in understanding who its original caretakers are and how it has been stewarded over time. Experts interviewed indicated that these teachings invite us to reconnect with the land, challenge colonial hierarchies that place humans above nature, and embrace the truth that we are part of, and in relationship to the natural world. One expert observed that through this process, we have the potential to begin to unlearn colonial perspectives, gain awareness of place-based histories, and build responsibility for stewardship. One volunteer observed that listening to Indigenous knowledge—rather than subjugating it—empowers us to advocate for practices that honor millennia of care and advance reconciliation and environmental justice. Multiple experts involved in running urban stewardship programs as part of an NGO indicated that the organization(s) intentionally include Indigenous elders and others in workshops that they run for their volunteers, not only as an incentive to volunteers but also because they want to build a shift in worldviews in those who are volunteering for the organization, hence partnerships with Indigenous Elders and teachers should guide staff and volunteer training and engagement, ensuring knowledge-sharing is authentic and respectful. The participants in the volunteer category interviewed all work for an organization that has committed to developing and delivering workshops that focus on Indigenous worldviews, as a way of influencing a paradigm shift focused on relationality. Numerous volunteers indicated the benefits of having Indigenous elders speak to them about the history of particular areas that they stewardship has taken place, as well as the introduction of various sacred teachings in helping them to connect to place, and to value their relationship to the land in a different way, describing the process as transformational. Having an understanding of and respect for the land can lead to collective care for the land.

As such, Urban Stewardship programs have the potential to combat colonial hierarchies to the land and shifting relationships to the land using the following approaches:

Observations		Recommendation
There are existing gaps, often self-acknowledged, in knowledge about land history and original caretakers of the land by those who are involved or want to get involved in urban land stewardship.	➜	Educational workshops led by Elders and Indigenous knowledge holders can build awareness around the history of the land and its original stewards, and their relationships to the land, introducing relationality to those who are interested in stewarding the land.

Awareness of Indigenous perspectives can shift relationships to the land	→	Incorporating Indigenous Ways of Knowing into stewardship activities to foster relational and respectful engagement with the land can strengthen relationships with the land, with a focus on reciprocity and relationality.
There is a need to question colonial hierarchies that position humans as dominant.	→	There is a need to embed anti-colonial principles in program design, emphasizing that humans are part of nature, not above it, to move towards a paradigm shift.
Awareness of land history and its use over time	→	Include land-based learning modules that explore historical and ecological significance of stewardship sites.
Listening to Indigenous people and supporting their advocacy	→	Establishing partnerships with Indigenous communities and prioritizing their voices in decision-making and advocacy efforts lends authenticity and accelerates necessary shifts in thought.

Table 3 - Observations and Recommendations for increasing Indigenous Ways of Knowing

2.2. Organizational commitments to Indigenization and systemic change for racialized participants rather than tokenistic gestures

To create a truly inclusive and equitable future for urban land stewardship, systemic change, rather than tokenism, is essential. Tokenism, which usually consists of perfunctory/superficial/symbolic efforts that are often seen by governmental bodies, municipalities, and many other organizations cannot lead to change. Systemic change means involving marginalized people from the onset rather than including them as an afterthought in various programs that are developed or run. Experts that I interviewed indicated that they are conscientious around the historically problematic nature of environmental work (for example, being historically white dominated), and that their organization is incorporating strategies to move beyond inclusion into anti-racist policies, with the goal of creating systemic change long term. They described not only the reflection needed on the organizational mission and ensuring that it is moving beyond inclusion into committed anti-racist frameworks, but also the work that is needed to address the barriers that prevent racialized and equity-deserving youth from seeing themselves in a field that has long been dominated by white professionals (Scott and Tenneti, 2024). One expert I spoke with shared a program established at his organization that focused on connecting racialized or equity deserving youth with self-identified racialized or equity deserving professionals in the field of environmentalism so that they can see that there is room for them in the profession, in hopes of involving more equity deserving people in

professional or in volunteer roles. Such programs can serve as pathways into these roles, shifting the demographic makeup of the sector, and of the urban stewardship organizations. Another expert working at the same organization indicated that they work with an Indigenous organization that supports training for Indigenous and Metis people that are unemployed or underemployed, in hopes of changing the make-up of their staffing long term. Experts described a project where they worked directly with an Indigenous community to enable a meaningful reclamation of space and create hands-on learning opportunities that advance reconciliation and environmental justice, emphasizing the value of not working with an intermediary for higher impact and speed. From my conversations with these experts, it emerges that organizations must commit to structural changes that diversify staff and embed explicit Indigenization strategies and anti-racist frameworks into their policies and strategic plans, with measurable progress and accountability: where incremental change can be seen and felt. Pathways to collective care in urban land stewardship can be built through systems change - by shifting from designing programs from just an egalitarian point of view - based on assumption that those participating in the programs are equals, which according to Scott and Tenneti (2024) masks potential inequities and obscures how racialization and racism operate in urban nature stewardships and more broadly, environmentalism, to an anti-racist framework and practice.

Observation		Recommendation
Racialized/equity deserving kids and youth are often unable to identify themselves with environmental professionals because it is a very white dominated field (Nature Canada, n.d).	→	Urban land stewardship programs/activities can support mentorship and experience with self-identified racialized professionals, which can help racialized youth to see themselves reflected in the space of urban land stewardship, encouraging them to partake in programs and even pursue careers in this area, leading to more impactful systemic change.
Training programs specific to youth and adults that are meant to serve as a pathway to careers in urban land stewardship can be very impactful.	→	Committing to systems changes and programs that help to ensure that the make-up of the staff of various Urban Stewardship organizations are not white dominated, as has been historically the case.
Numerous organizations are committing to Indigenization and Anti-Racism in organizational documentation, strategic planning, and outreach.		Explicit commitment to Indigenization and Anti-Racism should be made in a way where enabling activities are also outlined in organizational documentation and strategic planning, and where progress is measured

	→	and reported on as a key demonstrator of impact.
Direct collaboration with Indigenous communities, rather than relying on bureaucratic processes, enables more meaningful and timely stewardship activities.	→	Programs should be designed to work alongside Indigenous people to reclaim and care for land, creating opportunities for experiential learning and relationship-building, while avoiding delays caused by administrative obstacles.

Table 4 - Observations and Recommendations for organizational commitments to Indigenization and systemic change for racialized participants

Theme Three: Joint Accountability, Motivation and Self/Collective Identity for co-creation of Collective Care

A major theme emerging from interviews across all participants in this work is that urban land stewardship fosters accountability to oneself, to others, and to the land, creating opportunities to build pathways toward collective care. This in fact, is evidence of the importance of relational accountability: a prominent Indigenous worldview that emphasizes respectful, reciprocal, and responsible relationship building, moving beyond individual duty towards accountability towards the entire community, including human and non-human relationships. There is also emphasis here on the interconnectedness of all life - ensuring that actions benefit the relationship rather than the individual (Transformative Inquiry, n.d.). Some participants remarked that this sense of accountability strengthens self-identity and encourages solidarity through meaningful action, both with one another, and with the land. When individuals approach land as a living being they have committed to care for, they develop a sense of obligation that translates into tangible acts of good, which can manifest in numerous ways, ranging from community engagement and building to environmental restoration. These commitments not only give back to the community but also serve as acts of solidarity with those facing systemic injustices globally. In this way, urban stewardship becomes more than a local responsibility; it is a practice of care, justice, and interconnectedness with those who are geographically close, but also those who are further abroad. The strengthening of relational accountability helps to build pathways to collective care.

Findings

3.1. An increased sense of relational accountability through committing to specific actions or activities

Participants reported across all three categories that when they commit to urban land stewardship work, and for some, to any category of volunteer position where they are one of numerous people contributing towards a joint goal, that they have an increased sense of accountability to collective care through their commitment to action, and also to the land as a living entity or ecosystem that they are caring for. This type of motivation can be both intrinsic - what internally motivates the person to participate, and extrinsic - the potential extrinsic pressures that motivate people to actively contribute (Bennett et al., 2018). This connection to accountability to the land and to one another create opportunities to build pathways toward collective care, and is really a commitment to relational accountability. This sense of accountability strengthens self-identity, as one volunteer indicated that their ability to be responsible for caring for the land allows for the tuning into their inner-self, which they hold very important for constructing their self-identity, in different perspectives - physically, psychologically, spiritually, and socially. When individuals approach land as a living being they have committed to care for, a sense of commitment can lead to a deeper bond with others, the land, and can contribute to a pathway for collective care and interconnectedness. There is also a sense of solidarity, in that volunteers can identify in working towards a joint cause together. Numerous volunteers also indicated the importance of committing to work where you are accountable to and give back to the community. The experts interviewed also emphasized that developing authentic relationships with those you work with, whether volunteers, community organizations, and community leaders leads to greater commitments to relational accountability, so that people feel supported, welcomed, and committed to one another and the work, joint together through relationships and common goals. Accountability can go hand-in-hand with reciprocity, and can play into shared pathways towards collective care. In feeling the reciprocity with the land, participants mentioned that they felt accountable and responsible to providing care, committing to this sometimes very tangible work. One participant mentioned that land stewardship is not the only type of volunteer work that she partakes in, but that she chooses roles, even in other sectors, where she can directly support her community.

Observation		Recommendation
Volunteers, experts, and members of the public have all indicated the sense of accountability they feel once they commit to a cause such as urban land stewardship: accountability to the land, to themselves, to one another, and to the community.	➜	Cultivating relational accountability through respect, reciprocity, and responsibility should be emphasized in developing relationships with one another, which takes time and commitment.
The feelings generated from committing to and carrying out acts that are a tangible good can create a positive feedback loop - the more you contribute, the more you want to contribute.		Emphasizing the tangible impact one is having can help to encourage continued commitment and can foster relational accountability.

	→	
Committing to volunteering opportunities or contributing back to one's community, also as contribution to standing in solidarity where injustices and genocides are being carried out	→	Emphasizing how the work contributes more generally to combatting injustices locally, collectively, and globally could help volunteers make connections to how their commitments hold worth.

Table 5 - Observations and Recommendations for an increased sense of relational accountability

3.2 - **Cultivation of commitment, a greater sense of empowerment and collective care through embodied, land-based learning**

Based on Indigenous understanding of the land as relative and teacher, Land-Based Learning (LBL) is Indigenous teachings on the land, by Indigenous Peoples, centering on Indigenous worldviews and Ways of Knowing, with considerations of land of central importance to human existence, emphasizing the interconnectedness of life (University of Alberta, 2025). In speaking with all participant groups, it became apparent that physical, embodied contact with land/nature forges a deeper sense of connection and commitment to collective care, as there is a shift from the commodification of nature to an understanding of land and nature to be a living system that requires care, and that in turn provides us with benefits as well - in reciprocity. One participant with extensive experience delivering land-based education in the conservation sector to children and youth noted that land-based learning experiences, including those that have taken place in earlier life, can build a greater sense of confidence and empowerment for those who participate, as well as a greater commitment to nature as well. Numerous participants who are current land-stewardship volunteers indicated that their exposure to land-based learning experiences awoke a deeper interest in learning about various topics related to the stewarding of the land, including how to care for the plants, flowers, and various other species, and they were inspired to grow and build this knowledge. It appears that in at least some participants, the more you learn about the land, the more you want to learn, and the more you realize how much there is to learn. Once more, the theme of Indigenous Ways of Knowing came up, with those interviewed highlighting how connecting to Indigenous Knowledge through Indigenous elders has helped them to reimagine the land, its history, and its significance, and has helped with the understanding and commitment needed to work towards reconciliation. Throughout the interviews, it became apparent that knowledge building is connected to empowerment as well: confidence in better understanding one's surroundings and being able to pass knowledge onto other people as well, as well as confidence in exploring new interests through learning and realizing that you may have an affinity for something. These qualities, singularly or when compounded, can lead to a deeper understanding of our responsibilities to the land and can build a sense of collective care.

Observation		Recommendation
Embodied experiences with nature can help participants of programs to learn or re-learn, imagine or re-imagine our/their connection and relationship to the land	→	Land-based, embodied learning can be a tangible benefit - can play a similar role to courses but in a more practical or embodied way
Connecting to Indigenous Knowledge and Indigenous Ways of Knowing, reimagining the land and its role through building knowledge in this area, presented from an Indigenous perspective can awaken responsibility as well as a commitment to reconciliation work in those who participate in urban stewardship programs.	→	When designing educational workshops for participants, the role of involving Indigenous Elders and knowledge keepers cannot be overemphasized, as this can help to shift relationships.
Knowledge building empowers people, builds confidence in better understanding one's surroundings and being able to share knowledge to other people	→	Workshops and learning about the land in a reframed way can be very beneficial when it comes to motivation and long term collective care, meaning opportunities for participants should be a priority.

Table 6 - Observations and Recommendations for cultivation of commitment

3.3 - Improvements in individual physical well-being, self-identity, mental health and healing can lead to co-creation of collective care

Nature is widely regarded as a healing force, with research showing its positive impact on mental health and stress reduction. There is endless scholarly evidence that nature nurtures: from a brief walk to an extended hike, exposure to nature has been linked to a host of benefits, including improved attention, lower stress, better mood, reduced risk of psychiatric disorders, as well as increased empathy and cooperation (Weir, 2020). Participants in all categories mentioned the positive impact that they have felt through their exposure to nature through their land stewardship responsibilities, or their other connections with nature. One participant indicated that when overcoming a major challenge, sometimes people will turn to nature to help mitigate their suffering and to connect and ground themselves. as there is solace in being able to heal through nature. Other participants indicated that the connection to nature that they experience within the context of urban land stewardship can lead to the realization that being in nature and green space can have a major positive impact on one's physical and mental well

being, and participants may be inspired to integrate this into their lives, and the lives of their loved ones in more consistent ways. Numerous participants indicated that by engaging in urban stewardship, they not only benefited from these restorative effects but also cultivated a deeper sense of self and community identity. This connection to land and community fosters accountability and solidarity and has the potential to transform personal well-being into a commitment to care and justice. If those engaged in this work are experiencing the numerous benefits nature provides, they are more likely to want to share this feeling with others in the community as well, even if those in the community might not be taking a proactive part in stewardship, as nature and access to nature can be truly healing. Meaning, they want to contribute to the maintenance and protection of green spaces for not just themselves, but for the sake of others as well. When one experiences healing, one begins to have more space for empathy and compassion as well, and presumably has space to share this healing with others.

Observation		Recommendation
The act of stewarding is relatively physically active and usually asks that the volunteer be outside in nature/forest/habitat, which has scientifically demonstrated impact on health.	→	The physicality of urban land stewardship is an important component that can lead to an improved psychological state of mind. Even though the work can be physically challenging, there is a satisfaction in this work. Urban land stewardship tasks can be designed and delegated as to maximize the impact on one's health.
It has been scientifically demonstrated that exposure to nature is incredibly important for mental health and well being, giving those in nature/green space a sense of peace.	→	Emphasizing the scientifically proven benefits of nature exposure—such as stress reduction and improved emotional resilience—in communication to participants can get buy-in and contribute to collective care.
A connection to land and nature allows one to connect to self in meaningful ways on many levels - and can help in constructing one's identity, whether that is physically, psychologically, spiritually, or socially.	→	Emphasize the holistic identity formation that is possible through urban land stewardship. Hands-on stewardship, reflective practices, and cultural learning experiences can highlight how engagement with nature can strengthen self-awareness, resilience, and community belonging.

Table 7 - Observations and Recommendations for improvements to well-being leading to increased commitment

3.4 - **Commitment to collective care increases when participants see tangible improvements to projects/areas they are caring for.**

Numerous volunteers indicated that while they are working/volunteering, they often get feedback from people that are walking by regarding the impact that their work is having on the community, how it is beautifying the space for all, which they find satisfying, and which keeps them engaged in the work. There is evidence that seeing and feeling the tangible impact of their work can lead to sustained engagement with stewarding land we steward and can foster relational ties to place. Experts interviewed emphasized the substantial ecological benefits that are generated by land stewardship, with ample empirical evidence demonstrating that stewardship practices contribute to climate change mitigation, enhance urban tree canopy resilience, facilitate carbon sequestration, reduce the urban heat island effect, improve stormwater management, and support biodiversity through the introduction and maintenance of native and other species (Conway and Scott, 2020; Campbell et al., 2021, City of Toronto, 2013), which goes far beyond superficial beautification. These outcomes extend beyond direct participants and how they are individually impacted, producing community-wide environmental and social gains.

One participant also indicated that if he was more aware of the tangible impacts that their work makes, that they would be perhaps more willing to participate in programs more regularly. Seeing environmental benefits contributed to by urban land stewardship efforts actively contribute to a sense of collective care and increase equity, and can contribute to both intrinsic and extrinsic motivation, and helps to build connection to both the land and to others that this work is being done with, and the community that it is being done for.

Observation		Recommendation
There is evidence that land stewardship has a tangible impact on the environment, and which all contribute to collective care and equity, even to those that might not be doing the work directly.	→	Emphasize the tangible environmental and social impacts that the work has can increase buy-in from stewards and can contribute to continued protection or advocacy for rare types of habitats in the city/municipality/province, for everyone to benefit from.
When stewards/volunteers receive positive feedback about the work that they are doing from the community members, they strengthen their ties to the place, as well as to other community members who live there.	→	Providing an opportunity for gratitude from the community and sharing positive feedback with volunteers can increase motivation for stewardship and collective care.

Table 8 - Observations and Recommendations for showcasing tangible results

3.5 - Land stewardship can lead to collective care through strengthened personal connections and networks resulting from shared values and experiences

Many participants, ranging across the three categories, emphasized that engaging in volunteer opportunities related to urban land stewardship fosters social connection and network building, and shared values, all of which contribute to co-creating pathways for collective care. Some indicated that they sought these opportunities specifically for this reason, and that feeling connected to others who prioritized similar goals helped them to feel a sense of belonging. These practices enable intergenerational relationships and deepen commitments to both human and non-human entities, reinforcing a sense of shared responsibility. Through this work, mutual aid and reciprocity naturally emerge, as individuals collaborate to care for land and community. In doing so, stewardship becomes not only an environmental act but also a social process that strengthens bonds and cultivates solidarity. One participant noted that her act of volunteering has helped her to acclimatize to a new situation - being in a new city and has helped to foster a feeling of inclusion and belonging. Another volunteer participant did mention however that there is another side to this: if a group at a site is well established, a new person may feel like there might be a barrier to connecting with those who already have a long- and well-established relationship, hence it is important to be welcoming. However, many participants denoted a sense of community as being one of the greatest benefits of participating in these programs.

Observation		Recommendation
Urban land stewardship holds the benefit of community building, with programs and activities potentially giving people a sense of greater community connection and connection with like-minded people with similar priorities and contributes to building a sense of community with those with whom you are co-accountable with	→	Although it may not be the primary motivator for your organization or group, designing urban land stewardship programs to intentionally foster community building by creating activities that encourage collaboration and shared accountability can increase buy-in. Emphasizing opportunities for participants to connect with like-minded individuals sharing similar priorities and goals can enhance engagement and build a sense of belonging and collective purpose among participants.
Connecting through common goals, interests, and values can and does lead to long lasting relationships over time, merging into other joint goals		Structure programs and outreach efforts to emphasize shared goals, interests, and values as a foundation for building lasting relationships. Create collaborative activities that allow participants to work toward

	→	common objectives while fostering trust and connection. Encourage continuity by integrating opportunities for joint projects beyond initial engagements, ensuring that these relationships evolve into broader partnerships and collective action over time.
Has the potential to build intergenerational connections between people, based on who is volunteering (those who are seniors for example, and high school students who might be wanting to get their volunteer hours).	→	Create volunteer opportunities that intentionally foster intergenerational connections by engaging diverse age groups—such as seniors and high school students seeking volunteer hours—within shared stewardship activities.
Urban land stewardship can act as a way to build inclusion and acclimatizing into a new situation when one might be new to the neighborhood, city, province, country.	→	Reach out to those that might be seeking inclusion in a new situation, through settlement work or through community organizations, as land stewardship has the ability to foster feelings of inclusion.
Volunteering itself has the potential to build out mutual aid networks, and helps to combat learned helplessness through proactivity	→	Leverage volunteering opportunities as a means to build mutual aid networks and empower participants by fostering proactive engagement, which helps combat feelings of learned helplessness.

Table 9 - Observations and Recommendations for strengthening connections and networks

3.6 - **Pathways to collective care through reciprocity, appreciation, and common goals**

Participants indicated that reciprocity can be a big motivator for participation, and for forging collective care, and this applies to reciprocity between humans, and between humans and non-humans as well. When urban land stewardship programs build in reciprocity, whether that is in the form of learning or acknowledgement, participants mentioned that the relationship feels more equal: The volunteer is putting in the effort, but they are also getting something out of it as well but hopefully in a non-transactional way. Another participant indicated that it is wonderful when a program makes a point of connecting a steward to the right role, tapping into one's strengths and interests. Once more, the idea of relational accountability emerges through reciprocity between human and non-human actors, as those who participate nurture the plants and land, while the land and nature nurtures us as well. It is especially impactful if the impact is seen or felt locally or adjacent to where a person is living, working, a natural part of their day. This is why it is important that urban land stewardship opportunities be available throughout the

city. Participants also indicated that appreciation could contribute to continued motivation - whether that is community members and those living in the immediate vicinity acknowledging the work, or when the organizations running the programs take the time to do so in some way.

Observation		Recommendation
An appreciation for someone's work can act as a big motivator towards collective care, as it encourages people to keep taking part, both by community members in the vicinity, and by those who are running the programs, if supported in a format way.	→	Build in regular moments of appreciation for the work that volunteers contribute and share any appreciation for work done by others that comes your way.
Working towards common goals can act as a long-term connector and motivator for continued work.	→	Emphasize the goals and impact that the programs or tasks are working towards.
People appreciate when they can showcase their talents and hone their interests.	→	Take the time to find appropriate roles for volunteers. When organizations build programs that have something for everyone, this can be fostered more easily.

Table 10 - Observations and Recommendations for reciprocity, appreciation, and building common goals

3.7. **Urban Land Stewardship as Action in Solidarity Beyond Local Scope**

More than one interview participant who is an active land stewardship volunteer indicated that they felt that their commitment to volunteering with the land was also a reaction to the numerous atrocities taking place not only in Canada (such as the clear-cutting of Old Growth forests and environmental deregulation in our province that impacts all people, but disproportionately marginalized people) as well as those that were happening abroad, which often leaves people feeling helpless. One volunteer indicated that by participating proactively in a land stewardship program, they feel like they do not get stuck in "learned helplessness," and that their actions can serve as a powerful expression of solidarity that reaches beyond local boundaries. There is a sense that by engaging in actions that care for the environment or community locally individuals can symbolically support those living under occupation or in regions suffering environmental devastation caused by colonization and exploitation, while offering a tangible way to act. These efforts not only demonstrate empathy and connection but also help counter feelings of helplessness by fostering a sense of agency and purpose. Additionally, an idea resides that chains of active engagement in land stewardship programs that commit to Indigenous ways of knowing can transform into a network of solidarity.

Observation		Recommendation
Actions taken here can be representative of expressing solidarity for other people who are under occupation, or places that are experiencing environmental devastation through occupation, colonizing and capitalistic forces.	➜	Frame urban land stewardship activities as acts of solidarity by highlighting their symbolic and practical role in resisting environmental devastation and connect to global struggles for justice and collective care.
As people are feeling helpless given the state of the world, land stewardship programs can give people a sense of tangible accomplishment - a sense of being proactive and acting in solidarity with Indigenous people and others impacted by occupation elsewhere.	➜	Frame urban land stewardship as a way to be proactive and contribute in meaningful, tangible ways, in solidarity and care of others.

Table 11 - Recommendations and Observations for building solidarity beyond local scope

Theme Four: Barrier reduction, fostering resilience, and mutual aid through inclusionary practices

A major theme to emerge from conversations with participants and from the workshop that was held was that barriers to participation in the space of Urban Land Stewardship still exist, however there are initiatives and actions already taking place that can help to eradicate these barriers. A volunteer's personal motivations can also go a far way in terms of helping them to build commitment and accountability to the space of land stewardship. When initiatives reduce barriers to participation, there can be greater commitment and also greater frequency of activity, with an alignment of values and flexibility paving the way to strengthened collective care.

Findings

4.1 - **Reducing barriers to participation through an understanding of needs and relationship building**

Participants across all three categories indicated that urban land stewardship faces numerous barriers that can limit participation, many of which stem from social, cultural, and structural societal inequities. Some participants coming from the members of the public category, but who had also had extensive experience as experts working for urban land stewardship or adjacent organizations as well, indicated that language differences and cultural disconnects

could play a big role in why someone might not participate in an urban land stewardship program: there might not be funding for translation, or there might be a disconnect between the activity, and the values that a particular group holds dear. However, two experts interviewed spoke to the long-term connection building that has been happening between their organization and several communities and community groups that have become active participants in programming, for example, when it came to community planting events. Physical accessibility challenges often hinder inclusivity within these spaces as well. One participant indicated, through her professional experience, that there are system issues in providing access to those who may not be physically able to participate, including staffing and insurance costs. Another participant, in describing an initiative that she started at an elementary school, indicated that not all of her colleagues can participate to the same degree in all activities because of physical limitations. Some participants suggested that participation might not need to look the same for everyone: that some folks might still be interested in, for example, planning components, even though they might not be able to participate in all of the physical work. One participant indicated that she had volunteered with a program that was too physically demanding, but however, she still learned quite a bit about stewardship and herself in the process. Additionally, some participants might be neurodivergent, may have social anxiety, or who are introverted, may be challenged by the various dynamics within an urban land stewardship setting - whereby social interactions may feel like high pressure and high stakes.

Other considerations that might prevent the fostering of collective care center around logistics. These included considerations such as childcare support and associated costs. Numerous volunteers indicated that associated costs will often reduce their ability to participate. Associated costs can look like fees for participation, or resource costs associated with maintaining a space, amongst others. One volunteer indicated that costs do not bother her frequently, however, it is because she has means to afford to commit funds to this activity, fully acknowledging that many might not. Another participant indicated that many might not have other resources that might be necessary to participate in a positive way, including equipment or weather/activity appropriate clothing, and hence their participation might be limited.

Logistics play another major role. One participant indicated that one of the reasons she can actively take part in land stewardship, because the nature of that program allows for much flexibility in scheduling - she can participate at a time of her own choosing, with the level of commitment that she has time for given her other obligations, while still feeling the benefits of participation. Other participants indicated that while they highly enjoy and feel implicated by their time stewarding the land, if the location was different, or if the nature of resourcing was different, they would be able to participate more frequently. This is sometimes the case as resources that are available onsite affect how work can be done, and therefore how much planning has to take place, which can hinder someone's ability to participate. For example, if it takes two people to carry out the work in an effective way, a higher level of planning is needed. Hence, addressing factors like time availability and program timing—should be prioritized during planning, as these elements significantly influence engagement. By integrating these

measures, stewardship programs can better accommodate diverse needs and foster broader community involvement. A participant with an interest in land stewardship also indicated the need for flexibility when it came to stewardship initiatives, stating that there should be space for one-time participation as well.

Observation		Recommendation
Language access may be a barrier for participants during scheduled activities due to costs and availability of professionals to translate to a certain level of fluency, and this may have a big impact some of the time, and has bearing on how included someone feels, whether they decide to participate in the first place, or if they decide to continue to participate.	→	Creating content and information in languages of participants, or having translators/interpreters on hand for activities may build inclusion for those whose primary language is not English; Connect with community groups/leaders that can help to build feelings of trust and connectivity with the group, especially if the group is culturally dominant in the area where land stewardship is happening.
Physical access is a consideration, as inevitably, land stewardship is physical and not all people will be able to do all tasks.	→	Build in awareness around ableism into program design and offer various components that all potential land stewards can take part in - offer flexibility in roles.
People who are neurodivergent may have challenges in urban land stewardship settings, as can people who have social anxiety or are introverted may have challenges in this area, hence flexibility around how they can participate may be essential.	→	Be aware of the social pressures that people may experience in land stewardship settings. When possible, offer flexible roles for neurodivergent individuals, those with social anxiety, and introverted participants as this could ensure inclusivity and reduce barriers to engagement.
Programs do not necessarily accommodate those of all ages, those that require childcare, and may benefit from an intergenerational approach.	→	If possible, consider provisions for childcare as well as generational activities.
When there are associated fees, this tends to serve as a barrier, with many being unable to participate. It is most often the case that people will seek out opportunities that are free.	→	If possible, do not charge for participation, or use sliding scale fees. Providing support for initial and long term maintenance of programs.

When people do spend funds on such opportunities, they want to feel empowered in how they do so and have it be on their own terms. Even the cost of gas or transportation can also play a role in whether someone participates. Distance to activity, availability of amenities such as bathrooms and parking all play an important role.	→	Locations of programs are important as there are hidden costs (time, transit, parking, gas, etc.) of participation. Plan for necessary amenities.
The timing at which the programs are offered can play a big role whether someone can participate.	→	Offering flexibility in programming can go a far way in whether or not someone is able to participate in a program. If flexible, participants can carry out work on their own terms.
Transit options are too onerous - this may be amplified for various groups that are coming a distance from where they are volunteering, eg. equity deserving groups	→	Be conscientious regarding transit to events and if possible, provide transportation support to reduce barriers for volunteers, which could include offering transit subsidies, organizing carpool or shuttle services, and selecting program locations near major transit routes, although this may not always be possible.
If a location is not aligned with a person's life, it will reduce the amount of time they may spend there.	→	Offering numerous locales for participation may increase inclusion.

Table 12 - Observations and Recommendations for understanding of needs and relationship building

4.2. Collective care can be fostered through an alignment of values and flexibility

The alignment of "values" and "value" is critical in the design and outreach of urban land stewardship programs as numerous participants indicated that there needs to be an alignment of values for them to be interested in participating in a program. Often, and partly due to current funding structures, urban land stewardship programs will have very different motivations and priorities for running programs, than stewards might have for volunteering in them. Based on conversations with this study's contributors, it is found that participants' personal values must be meaningfully reflected in program objectives, hence there is a necessity to see beyond organizational goals, and tap into the potential needs of the stewards for long term buy-in. If a participant does not feel aligned with their perceived motivations, competing priorities often take precedence. In a context where individuals are managing limited bandwidth across multiple causes and responsibilities, the perceived impact, motivation, alignment of values can play a big role. Participants also mentioned one major

reason for connecting within programs is an alignment of values. When a land stewardship program does not tap into the motivations and values, the steward may lose interest, and the program risks being deprioritized, underscoring the need for intentional strategies that integrate personal and collective values into stewardship efforts. What is interesting is that the two do not need to be perfectly aligned, there simply needs to be an awareness and respect of one another's priorities for buy-in to take place.

Offering varying levels of commitment and diverse opportunities within urban land stewardship programs is essential for broadening equity and access. Flexibility in program design—such as providing a range of roles and volunteer options that accommodate different time commitments—creates multiple entry points for participation. One expert shared that this is one of the reasons why he thinks his organization has had so much success over such a long period of time, is that they offer many different entry points that meet their needs in terms of their overall mission, with programs designed in a way to meet the needs of a variety of volunteers, no matter what their priorities might be. Informal and flexible land stewardship opportunities can also contribute significantly, as they allow individuals to engage in ways that fit their capacity while still contributing meaningfully to collective goals. By ensuring roles are available for everyone, regardless of schedule or experience, stewardship initiatives can foster inclusivity and strengthen community involvement.

Observation		Recommendation
The connection to values must be strong to build commitment towards collective care. Bandwidth is being used for many different areas and causes, so alignment must be there.	→	Tap into the motivations of the participants and align organizational priorities. The same goals can be achieved for a variety of reasons.
In competition with many other priorities potentially - motivation/impact/Unique Value Proposition must be of a high enough value for people to want to participate people will have to want to return as well.	→	Clearly articulate and emphasize tangible impact, any potential personal benefits, and as well as community values that participation could bring. Build relationships with participants, when possible, as this could help you in tapping into what makes experiences rewarding, helping to ensure that they will prioritize the program.
Varying levels of commitment and opportunity can broaden equity and access for participation and flexibility or range in programs offered can offer a broader point of entry for people, with emphasis on offering people different	→	Developing various commitment levels can help in creating possibilities for numerous types of participants and can contribute to greater good.

ways to volunteer and participate that are accessible in terms of time commitment.		
There is value in having informal volunteer participants as there are numerous ways that people can participate.	→	Develop roles for everyone. This can be done incrementally and over time.

Table 13 - Observations and Recommendations for alignment of values and flexibility

4.3 - **Learning as a benefit and a motivation can contribute to the building of collective care and mutual aid.**

Throughout my conversations with the participants, the idea of learning came up frequently as a theme. Many of the participants who actively volunteer as land stewards indicate that various workshops that they are exposed to help them to learn about the land in a reframed way - about their connection to the land and about the land's history, and often the process engages with Indigenous Ways of Knowing, which offer critical perspectives on the role of land and its stewardship. Through this a new connection is often forged and motivation to continue in their work emerges. This motivation has the ability to push us towards collective care. The experts I spoke with have also indicated that the workshops that are offered through their program to their volunteers are designed with much intention: they are meant to help those who attend to re-learn and re-imagine our connections to the land, in hopes of shifting our focus, and fostering deeper awareness regarding our collective responsibilities. In both benefit and motivation, there appears to be a connection between learning, knowledge, and empowerment. Numerous active participants who have been able to attend workshops have indicated that their newfound knowledge has helped them to feel more confident in their environment, can help to grow interest in the work (as you learn more, you want to know/learn more) and confidence in being able to pass information on to others, and to share with the community. Numerous participants indicated an interest in learning practical skills, such as caring for plants, flowers, and other species, while also exploring broader ecological relationships, and that there is a sense of reciprocity in that the volunteer is sharing their time, while gaining practical skills that they can in turn share as well. Such learning is empowering, enabling individuals to better understand their surroundings and share knowledge within their communities. Numerous participants also indicated that when this type of embodied learning is introduced to younger people, sometime stemming from those who have been inspired through their own land stewardship work, the results could be a lifelong commitment to stewardship work, supporting environmentally sound policies, and generally looking a nature not as a commodity but as an interconnected living eco-system that we can support, and in turn, supports us. This all strengthens both personal and collective connections to the land.

Observation		Recommendation
Opportunities to learn can build interest in learning about various topics related to the stewarding of the land, including how to care for the plants, flowers, and various other species that are connected to and make use of the land, and to understand our connection to it.	➜	Offering workshops and learning about the land in a reframed way is very beneficial when it comes to motivation and reciprocity.
It appears that learning is connected to empowerment as well: confidence in better understanding one's surroundings and being able to pass knowledge onto other people.	➜	Understanding the value of knowledge that participants gain from learning about the impact of their work, how they can potentially improve it, and their relationship to the land. Realize that there is satisfaction in applying what you have learned and also sharing with others what you have learned.

Table 14 - Observations and Recommendations for giving access to learning

4.4 - **Tapping into a love of and awe for the beauty of nature can help to build collective care**

Urban stewardship programs can foster collective care by tapping into and cultivating a deep love of nature in its stewards, many of whom already possess this trait. This love and awe often serve as the foundation for participation in stewardship programs, motivating individuals to connect to this passion, and often, share this passion with others, and many of the participants that I spoke with indicated that they were motivated to find stewardship programs to be part of because of their deep love of nature, and gratitude that they have ample nature to connect to. Many urban land stewardship participants value opportunities to advocate for nature and align with others who fight for the rights of ecosystems and species that cannot defend themselves, and many want to identify as people who do so. Commitment to collective care through urban land stewardship is also fueled by awe and wonder. One participant mentioned that she is in constant awe in observing the resilience of plants and animals and their ability to persevere and adapt regardless of what is happening in their environment. Others mentioned the awe of witnessing the sensory richness of natural landscapes and their ability to impact how they feel. Such experiences of awe often serve as an entry point to action, transforming appreciation into advocacy and deepening the resolve to protect nature. Tapping into this awe can help move people towards collective care and action.

One participant stated that early exposure to nature, particularly during childhood, and for similar reasons as those above, plays a critical role in shaping lifelong appreciation and care for nature - seeing it as a living ecosystem rather than as a commodity. The same participant

expressed concern for youth in urban settings who lack exposure or opportunity to be in nature - and indicated that creating opportunities to connect with green spaces is essential in building this connection. Such experiences have the ability to not only foster personal affinity for the environment but also cultivate future advocates and voters who prioritize conservation and policies that protect urban ecosystems. Motivations for engaging in urban land stewardship often stem from a desire to protect and maintain the environment, coupled with a sense of empowerment. Numerous participants, both in the interviews and in the workshops indicated that the loss of nature can be devastating, as we are observing through the decisions that governmental administrators are making. A motivation for collective care could be that due to your love or nature, in the act of stewarding land, you feel like you are actively defending nature - that you can contribute to the protection of rare habitats, to protect the green space that exists and hopefully grow and expand it for all beings to enjoy into the future.

Observation		Recommendation
Those who get involved in nature stewardship programs will typically have a love of nature that they want to pass on to others and will search for opportunities for stewardship from an existing love of nature.	→	Leverage participants' existing love of nature by designing programs that allow them to explore their passion and appreciation, and also share it with others.
There is a sense of awe when it comes to nature, in terms of it being a potential sensory overload and awe can be an easy pathway to action for some. A sense or appreciation of beauty can lead to people wanting to protect or take care of the said beauty.	→	Those who are already mesmerized by nature's beauty may be seeking opportunities to connect with nature. Using social media and other interest based platforms may help these nature lovers to find and collaborate/work with you.
Exposure to nature in younger life can lead to awe - with children developing an appreciation of nature leading to deeper interest and involvement, or at least respect, as they get older.	→	Create opportunities to inspire love of nature in the young: create intergenerational opportunities for people to participate in because Providing regular exposure to natural spaces during formative years can foster lifelong respect for nature and increase future engagement in conservation and stewardship activities.

Protecting or maintaining the environment/empowerment - giving a platform and ability to advocate for nature and to be around people who fight for the rights of those who can't fight for themselves.	→	Tap into the feeling of empowerment that protecting the beauty can bring to participants, circling back to the impact that action can have in terms of greater goods and collective care.

Table 15 - Observations and Recommendations for using love of and awe for nature

4.5 - Collective care through social connection and shared goals

Social connections developed through urban land stewardship programs can contribute to collective care. In my conversations with participants from all categories, I heard again and again that urban land stewardship serves as a powerful source of social connection, offering individuals a way to find their people or "tribe," and build a sense of community through shared purpose and goals. Respectful dynamics can create opportunities to feel supported and to forge relationships that go beyond the work that is carried out together, developing equitable relationships, and engaging in mutual aid, where contributions are respected, appreciated, and balanced according to each person's capacity. These interactions often lead to deeper, long-term connections that extend beyond the immediate context of volunteering, as people feel connected through common topics. Numerous participants also shared those common interests—such as caring for plants or discussing food-related topics like herbs—provide relatable entry points for conversation and collaboration, mutual understanding, and increased connection. For newcomers to a city or country, these programs can foster a sense of inclusion and belonging. Moreover, stewardship embodies reciprocity: volunteers nurture the land, and in return, nature offers restoration and empowerment, helping to combat feelings of helplessness while reinforcing the value of collective care.

Observation		Recommendation
Urban land stewardship is often used to forge new connections - to find your people/village/tribe, and to work together towards a common goal: to build out a sense of community and network of like-minded people with the potential for collective care beyond the immediate members, and for mutual aid.	→	Find ways of designing programs to intentionally foster social connection by creating collaborative activities that can connect participants around shared goals, and that could lead to building close networks with others, networks of like-minded individuals, encouraging mutual aid and collective care that extend beyond the immediate group. This could include mentorship programs, skill sharing/tool lending, programs where those who usually

		do not have a chance to intermingle do (intersite visits), offer recurring programs.
Urban land stewardship can foster common topics and goals that can build deeper connections across cultures and experiences	➜	If possible, develop programming that help to facilitate social interaction and potentially reflection, as this could help participants connect on shared values and goals.
Dynamics can foster harmony, integration and inclusion. While some might feel like they do not feel included if they join a team when there are bonds already formed, other feel that equitable relationships where people are not pushy, where they take on roles that suit them, where the relationship is in harmony, and where people accept how much each one can give and go with the flow around workload.	➜	Promote values that assist in fostering harmony, through modelling and support. Promote equitable, non-hierarchal relationships that help everyone to find their role.

Table 16 - Observations and Recommendations for tapping into social connection

Foresight Methodologies

A. Three Horizons

Three Horizons mapping was chosen as a model as it helps to discover relationships of change and innovations and time-based shifts towards preferred future outcomes and can serve as a vital tool when it comes to futuring workshops. In line with my research approach, the Three Horizons approach assumes that multiple futures can coexist in any present moment, which aligns with the work of Leitão, with the three overlapping curves providing a “heuristic for determining the strategic fit of actions chosen to promote a desired future vision, versus a continuation of default ‘business as usual’ or non-desired outcomes.” (Jones and Van Ael, 2022). Horizon One sloped down from the present peak which indicates inevitable decline that may carry some current practices into the future; Horizon Two represents a potentially ‘turbulent transition’ to the desired future, but holds within it the necessary innovation potentials to do so; Horizon Three portrays future outcomes that are desired by those that are involved in the phenomenon: a potential shared vision, usually at least ten years into the future.

The Three Horizons foresight tool, through a series of questions, allows us to understand where we are, where we want to be, and how we can get there. Below is a summary of findings for this phenomenon and context.

Please see Appendix B for Three Horizons tool ideation.

Horizon One: Business as Usual
A. What is happening today?

Figure 1 - Horizon One - What is happening today?

Today, there is a broad variety of urban land stewardship initiatives taking place, heterogenous in nature, ranging from individual citizens to those working in community groups, to those run by localized NGOs in partnership with civic organizations and for profit corporations. Some programs are well established, offering numerous entry points and supports, while others on narrow goals and sets of approaches. Many of the urban land stewardship initiatives rely on the civic and public sector for infrastructural and funding support that is in many cases insecure or temporary, resulting in a lack of stability. In many cases, there is much bureaucratic oversight in place to run programs, creating stagnation and loss of agility, although many

initiatives avoid this by remaining small or under the radar. Systemic environmental injustices and other systemic causes prevent many from participating in urban land stewardship, and capitalistic approaches result in funding being tied to quantitative results, which can skew goals and priorities for programs. In the context of formalized programs, systemic inequities continue to exist. For example, while volunteers may represent community demographics, staffing might not be representative of equity deserving groups. Additionally, there still tends to be a Western, human-centered approach to land stewardship versus an Indigenous, nature centred approach whereby humans are thought of as being part of nature rather than working to dominate it.

B. Look back - how did we get here: what are the values that brought us here?

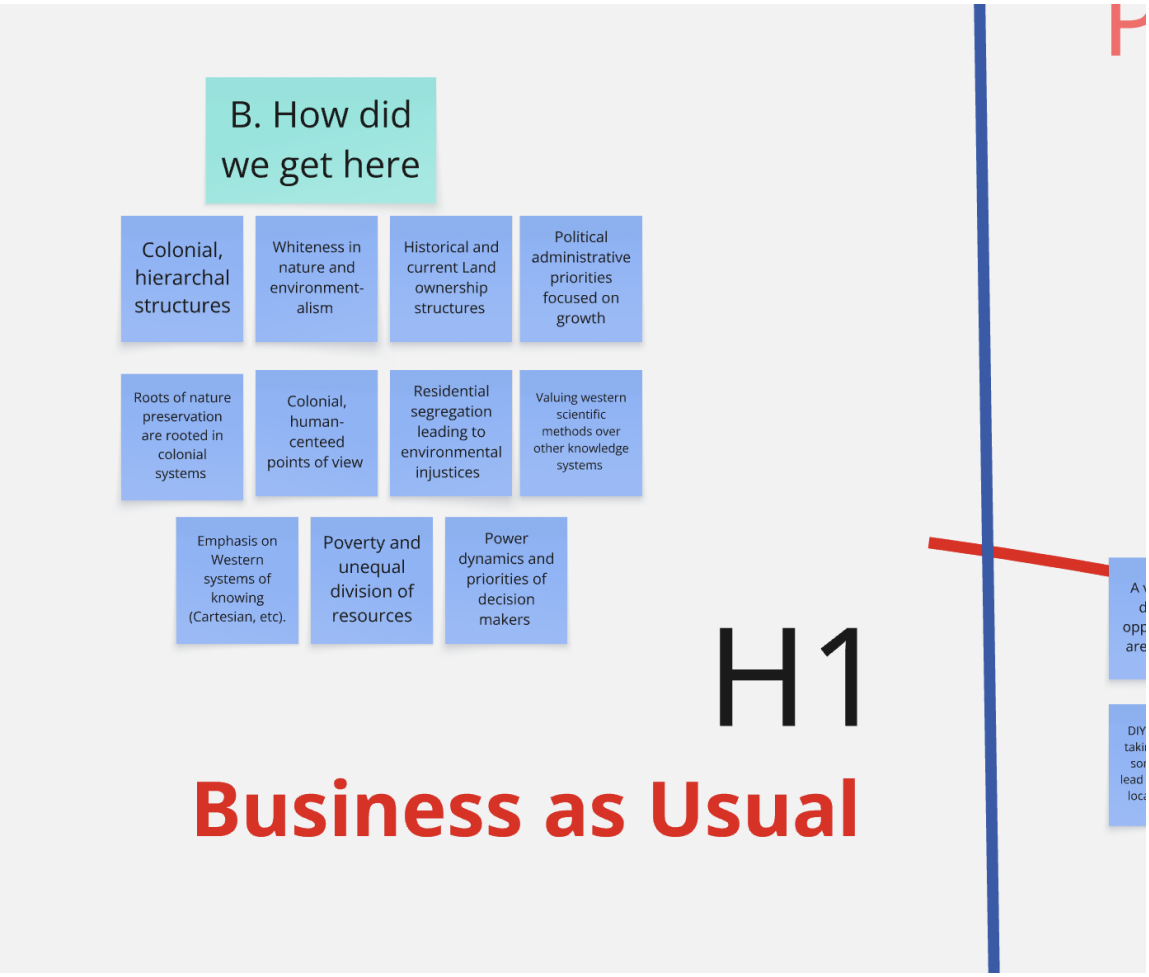

Figure 2 - Horizon One - How did we get here

Many of the existing injustices and imbalances stem from colonial hierarchical structures that are specific to Canada, including hierarchies of power, lack of representation in environmental stewardship and the field more generally, land ownership structures that have concentrated ownership of land in the hands of the few, colonial land dispossession of Indigenous peoples

or racist housing policies. Additionally, emphasis on quantitative focused measurable results are rooted in capitalist systems that emphasize continued, unstoppable growth rather than on relationship building and relational accountability not only between one another, but also to the land as well. Western and Modern systems of knowledge have dominated our thought, hence there is a prevalence that humans dominate nature, rather than being present within nature. Current and previous political administrations have amplified and prioritized a need for economic growth, contributing to the deregulation of environmental policies for the "sake" of supposed economic stability and growth. Under the provincial government, environmental deregulation continues to be enabled through bills such as Bill 5, Bill 66, and Bill 197 coming into effect.

C. **Why do we believe that it is failing and what is contributing to its demise, and how fast is it likely to fail?**

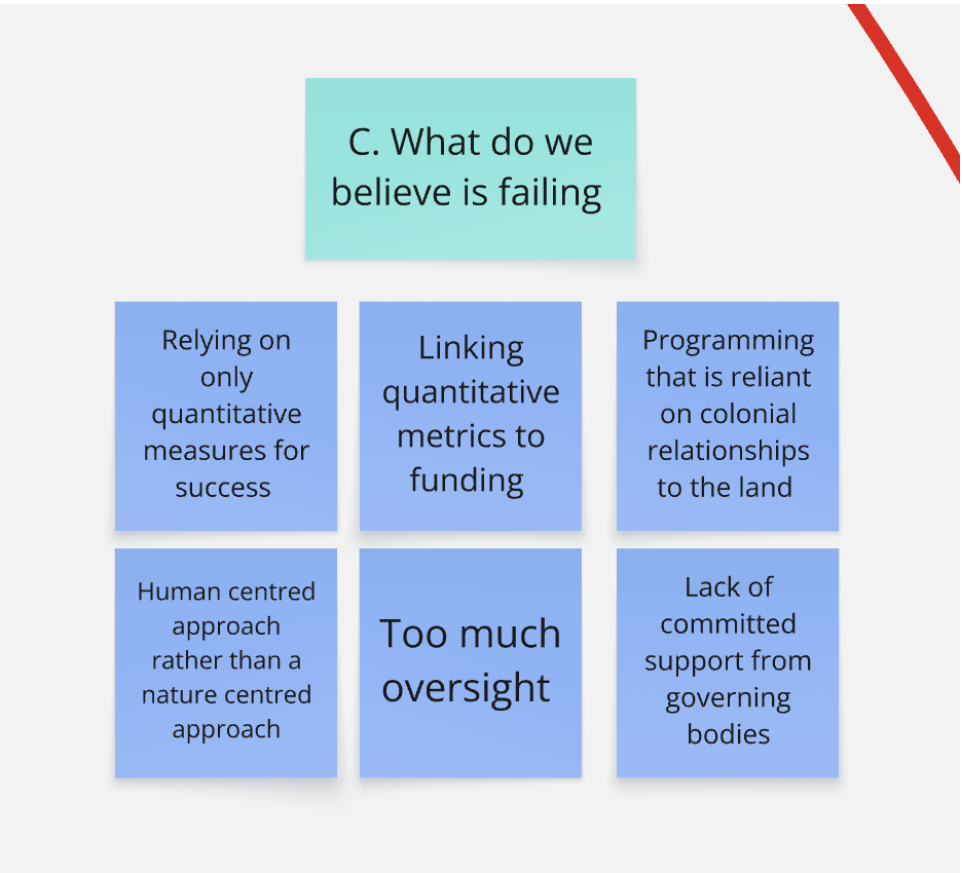

Figure 3- Horizon One -Why is the system failing

What is failing in the current system includes relying on quantitative measures exclusively for success and linking quantitative measures to funding. In many cases, programming is still reliant on colonial relationships to the land, where humans are seen as masters of rather than in reciprocal relationship with the land, and as we move into the future, this needs to change. Human centered rather than life centered approaches are failing us, as are bureaucratic

processes that hinder reconciliation and healing. A continued focus on hyper capitalistic economic growth makes commitments from our governing bodies to the environment frequently superficial.

D. **Is there anything valuable about the old system that we would like to retain, for example, infrastructure?**

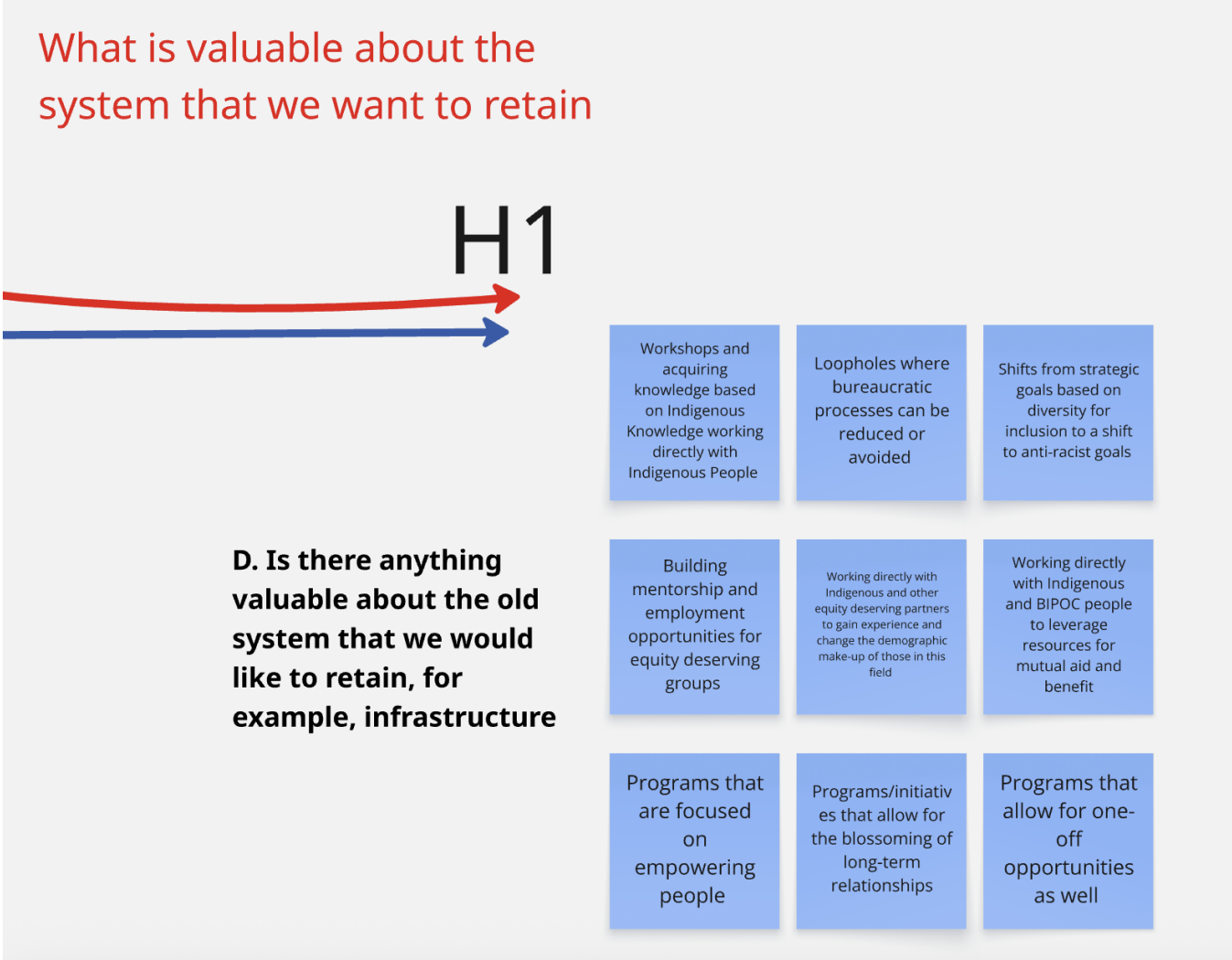

Figure 4 - Horizon One – What is valuable about the old system to take into the future

The existing system does have components that we can and should take into the future including initiatives such as workshops delivered by Indigenous people included in a non-tokenistic way: where they are exposing those previously unaware to Indigenous Ways of Knowing as a paradigm shift rather than a one shot lesson, and where organizations are making efforts to contribute to systemic change by working with agencies to train and create pathways for Indigenous and racialized people, through official training and mentorship opportunities, and amplifying programs that are meant to empower people. Situations where

bureaucratic processes can be avoided or where citizens, organizations, and community groups can work directly with Indigenous and racialized citizens and groups in reciprocity to gain experience, learn from one another, and focus on systemic change, such as shifting the demographic make-up of those within the urban land stewardship space. There are also instances now where organizations and their staff are working directly with racialized people to leverage resources for mutual aid and benefit, using incremental steps in programs/initiatives that allow for the blossoming of long-term relationships.

Horizon 3: The Emerging Future

E. What is the future that we want to bring about?

From the feedback gathered from interviewees, workshop participants, and from the desk research that I also conducted, our future looks different with respect to a variety of important areas. Here is a summary of each.

1. **Relational Growth**: the process of deepening connections and fostering mutual development ultimately creating a more resilient and fulfilling bond for all.

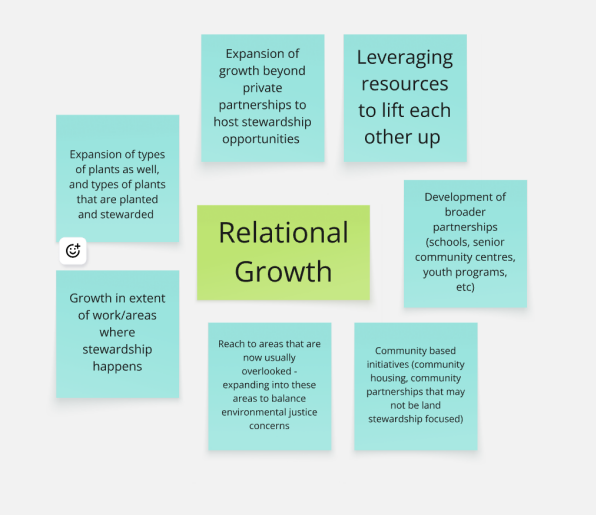

Figure 5 - Horizon Three - Relational Growth

When it comes to relational growth, the future sees an expansion of how and where urban land stewardship happens, with an expansion of the types of partnerships we have and with whom. We see a surge in Community based initiatives, development of broader partnerships (schools, senior community centers, youth programs, etc). Initiatives are seen in all geographic areas in the city including where they have been formally inequitably distributed, expanding into these areas to balance environmental justice concerns. To support relational growth, resources are leveraged to lift one another up with collaboration as a core principle. There is also an expansion of the definitions of stewardship: the type of initiatives that we see, and even the types of plants that are grown.

2. **Infrastructure**: This includes physical and foundational systems of support for land stewardship.

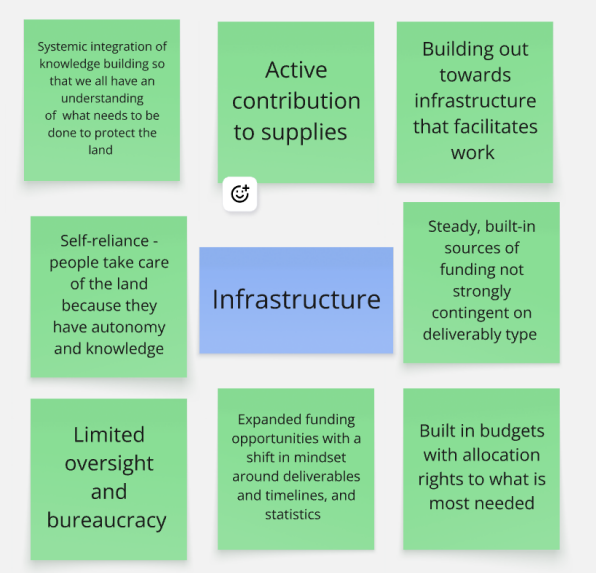

Figure 6 - Horizon Three - Building Infrastructure

When it comes to infrastructure, an ideal future holds an abundance of resources. There is a focus on building out localized support (access to water, tools, people, knowledge) all in hopes of building self-reliance and autonomy, giving people a greater confidence and motivation in knowing what to do and how to do it. When it comes to shifts in the nature of our relationships, the future holds an abundance of change. There are expanded funding opportunities that are based on relationship building and relationality, and localized needs rather than in quantifiable results, with allocation rights to what is most needed. There is a shift in mindset around deliverables and timelines, and a move away from oversight and bureaucracy, with localized initiatives and agile approaches.

3. **Shifts in relationships towards a culture of relational accountability:** reciprocity, interconnectedness and respect.

Figure 7 - Horizon Three - Shifts to Relational Accountability

When it comes to our relationships in the future, there is an emphasis on relational accountability, interconnectedness and respect. Those caring for the land and working together have a spirit of care and understanding towards one another resulting in increased community. There is a shift away from mere inclusivity towards anti-racist practices as a priority, with a commitment to mutual aid - caring for ourselves and one another, and through shared goals and values. Our relationships with outside agencies shift away from reliance to partnership, and friendship and genuine engagement helps us to find abundance. Our relationship to the land also changes to one of reciprocity.

4. **Knowledge and Aid Exchange:** Sharing of information for mutual aid and support.

Figure 8 - Horizon Three - Knowledge and Aid Exchange

Ideally, there will be an increased focus on a reciprocal exchange of knowledge and aid. People who identify as stewards and who have experience can support those who might just be starting out through seed banks, helping knowledge building and mentorship, intergenerational knowledge transfer to kids and youth, and through embodied learning, for a better connection to nature in hopes of bigger respect for nature, and commitment to long-term pro-environmental policy. When everyone contributes what they know, shares expertise, insights, and resources within a reciprocal flow, we can all benefit.

5. **Shift of Perspectives and Paradigms:** a redefinition of how we see ourselves within the world.

Figure 9 - Horizon Three - Shift in Perspective and Paradigm

A paradigm shift occurs as people learn about and reconnect with Indigenous Ways of Knowing, where humans are a part of nature rather than dominating it, where the idea of planning and stewarding seven generations into the future is a way of being. The city moves towards true sustainability, where nature is seen not as a commodity, but as a living ecosystem of which we are a part. Because of this, there is a shift in metrics from quantitative to qualitative when it comes to impact. We look at the invisible impacts of urban land stewardship in connection and community building, rather than one that measures canopy coverage, or “units” put into the ground - a shift away from monetary values for monetary returns.

F. What are seeds of the future visible in the present?

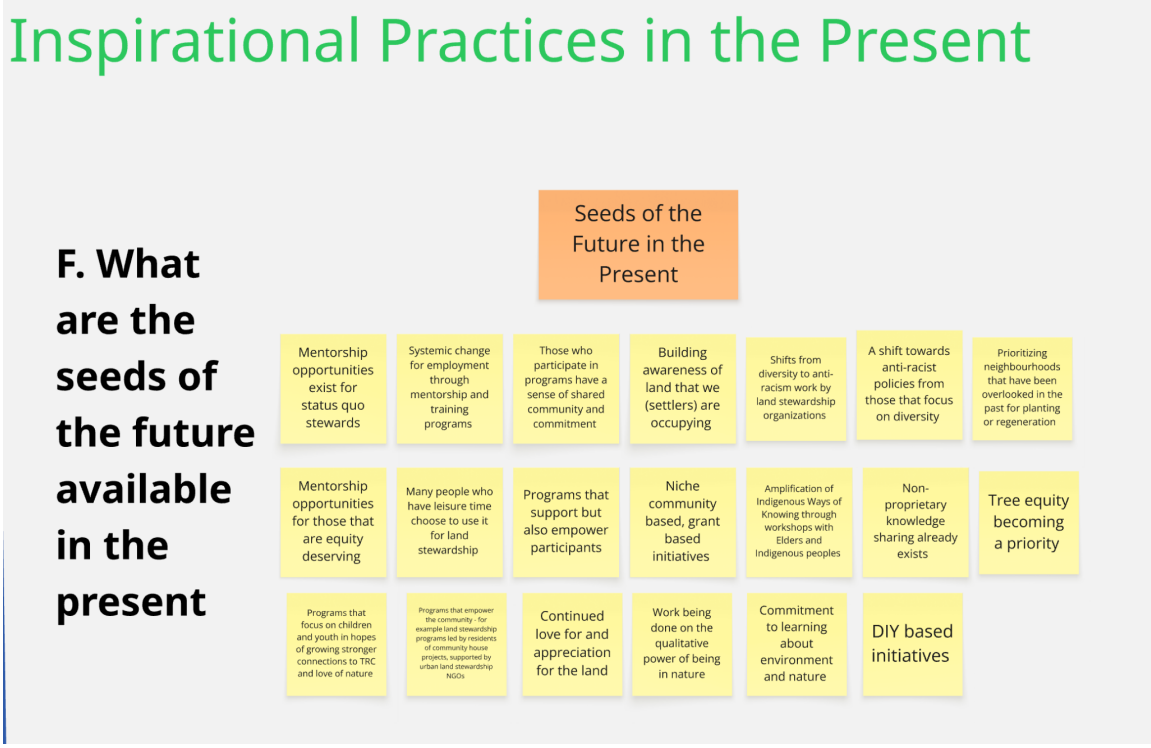

Figure 10 - Seeds of the Future in the Present

The process also found that there are already many seeds of this future in the present that should be scaled and taken into the future, including the following:

- **Shift in Equity Focus:** Many programs are refocusing their strategic priorities, where rather than focusing on inclusivity, they are moving toward anti-racist work and structural/systemic equity, although it does feel that this will be a continual struggle.
- **Mentorship & Empowerment for systemic change:** Currently, there are programs that focus on and offer mentorship for equity-deserving individuals, which has the potential to create pathways for systemic employment changes rather than the tokenism that we sometimes see and have historically seen.
- **Community Commitment and accountability:** Many current participants experience a strong sense of personal and shared responsibility and belonging within their land stewardship commitments.
- **Land Awareness through the focus on and integration and amplification of Indigenous Ways of Knowing:** There continues to be a growing recognition of settler occupation and the need for reconciliation, and many are doing the work of acknowledging and amplifying Indigenous Ways of Knowing through workshops and learning by Indigenous Elders, in hopes of reshaping world views.
- **Green/Tree Equity and Targeted Regeneration of those areas affected by environmental injustice in hopes of empowering residents:** Prioritizing historically overlooked neighborhoods for planting and ecological restoration in hopes of building empowered neighborhoods, for example, through tenant-led community housing projects.

- **Youth Engagement:** Programs for children and youth to foster long-term environmental stewardship and commitments are prevalent
- **DIY & Grassroots Initiatives:** Niche, grant-based, community-led projects and non-proprietary knowledge sharing are common.
- **Qualitative Value of Nature:** There is a growing awareness and emphasis on the emotional and health benefits of being in nature rather than focusing on strictly those that are environmental or ecological.

G. Whose work are these present possibilities built upon: whose work, vision, culture?

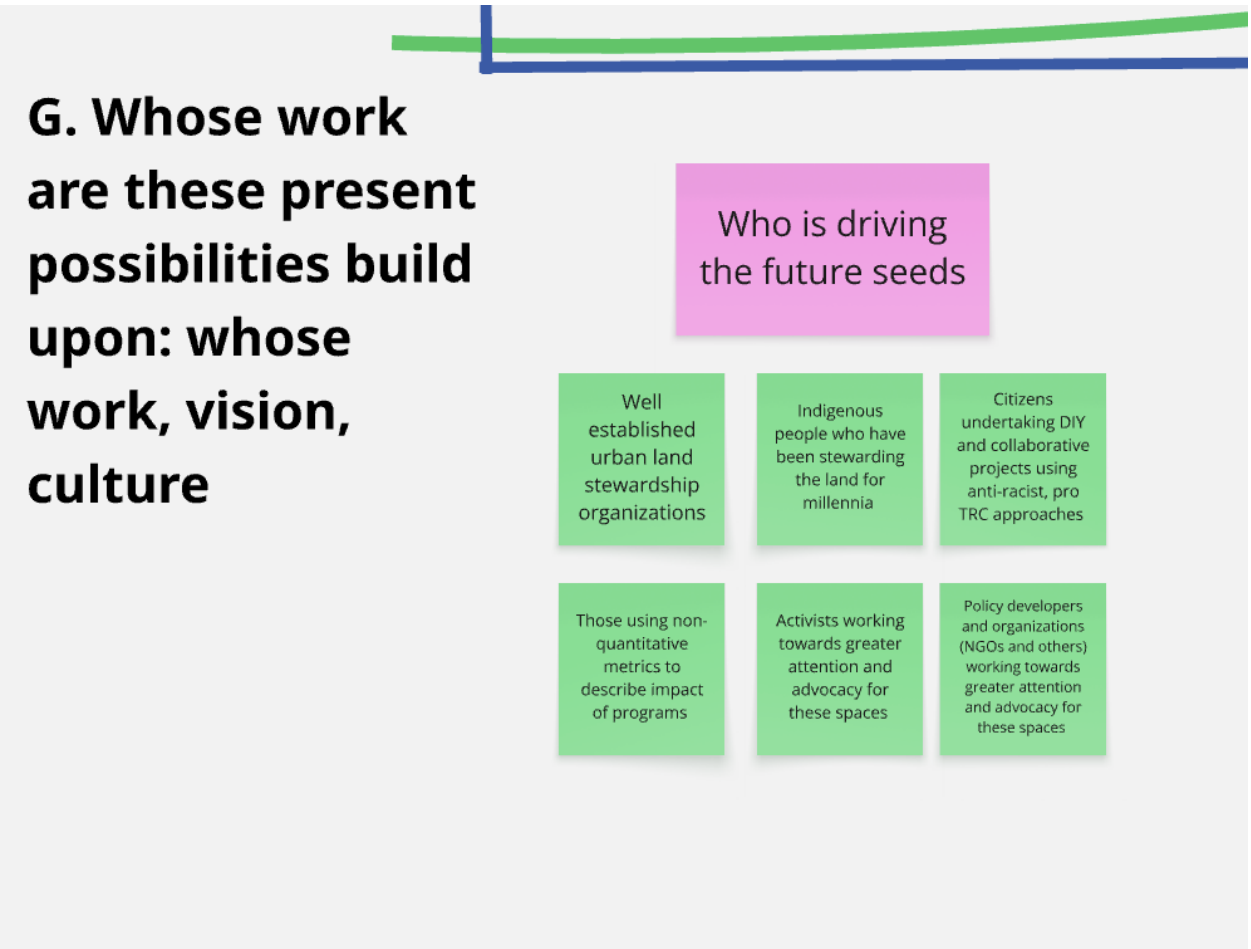

Figure 11 - Horizon Three - Work will we Build on

The present possibilities that can support the ideal future are being planted and supported by Indigenous people who have been stewarding the land for millennia and who take the time and generously share their knowledge. Additionally, well established urban land stewardship organizations who are connecting in real and meaningful ways with Indigenous people and communities, and committing to anti-racist approaches, relational accountability and systemic change. Urban land stewardship today involves citizens leading DIY and collaborative projects grounded in anti-racist and Truth and Reconciliation (TRC) principles, while using qualitative

measures to capture program impact, and advocating for their value. Alongside this, there are examples of volunteers and advocates working for greater recognition and protection of green spaces and environmental justice.

H. **How can they be scaled and spread - what actors already working in this space?**

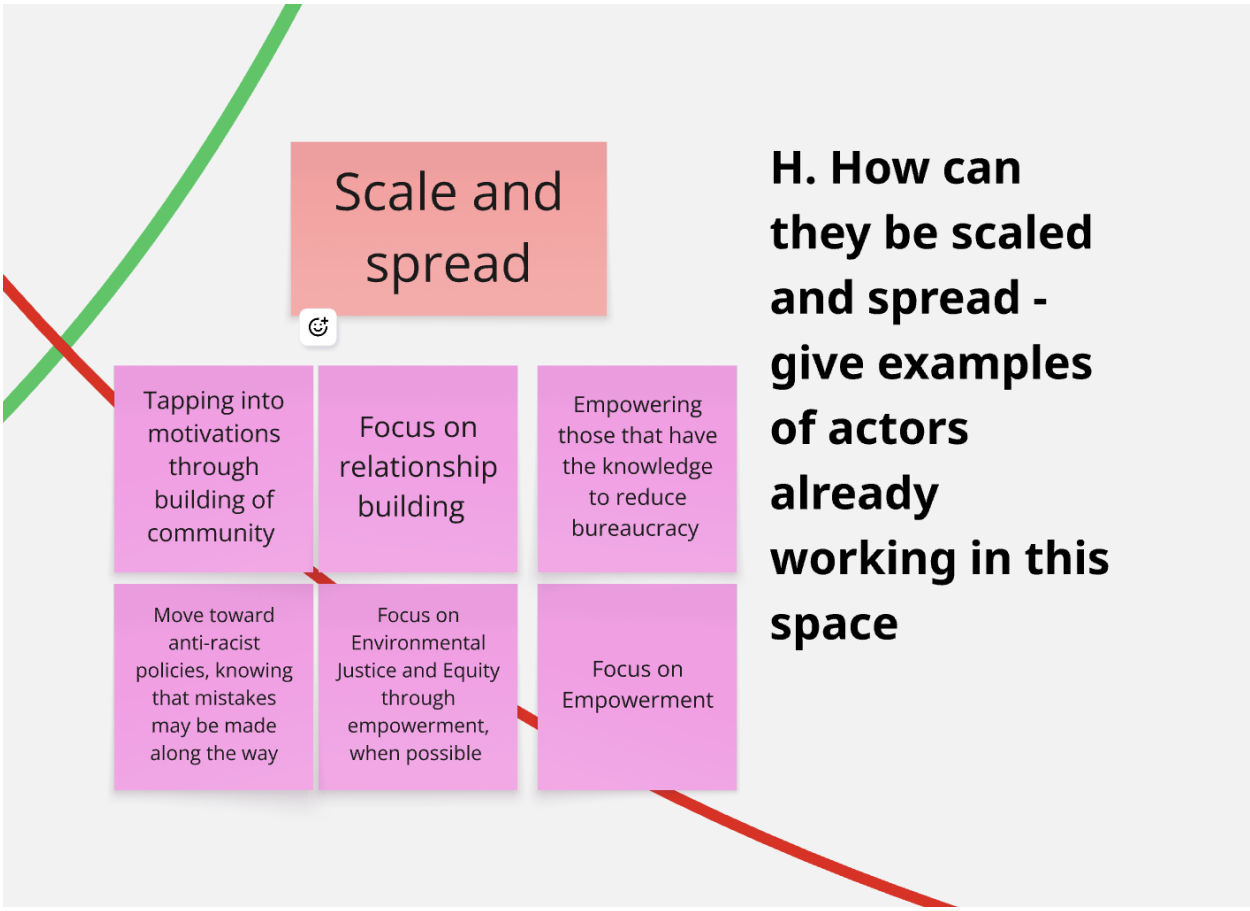

Figure 12 - Horizon Three - Work that will be Scaled

As there are actors already working in this space, their actions can be elevated and scaled. There are those NGOs that are tapping into and prioritizing the motivations of communities rather than promoting directly their own priorities, or in the very least, finding a way where both groups can achieve their goals, through building relationships. There are NGOs in the space of urban stewardship that are working directly with those who hold Indigenous knowledge and find loopholes to avoid bureaucratic procedures, and to give space and land back, helping to empower people and take steps toward reconciliation. Focus on amplifying work that shifts the system towards where we want to go, through mentoring and training and employment opportunities that change the makeup of the space. To move into the future that we want, the focus needs to be on empowering people to self-determination and self-actualization.

I. What are competing visions of the future?

The vision presented under question E what we want the future to look like. According to the work of Bill Sharpe in the area of the Three Horizons, we need to look at what is being born, and how do we help it to arrive well, what is dying and how can we help it to let go and leave well, and what is being harnessed for the future that we want. Of course, how the future looks will be based largely on how we act. If we focus on the harnessing of disruptors, even those that may appear seemingly negative, we can get on the path towards our imagined horizon. For example, when it comes to the various provincial bills that are being passed by the current administration, we can use this as a point of awareness where people awaken and advocate to counter the negative impacts on our city, which may result in a variety of initiatives that get us to the future that we want to see.

Horizon 2: Disruptive Drivers and Innovations

J. What are the disruptors?

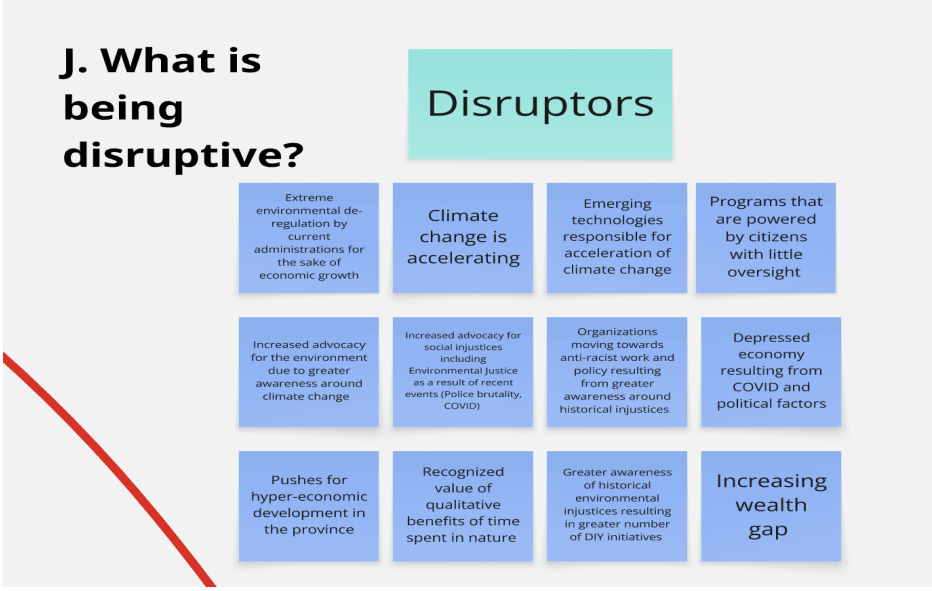

Figure 13 - Horizon Two - Disruptors

There are numerous disruptors that are impacting how the future will be shaped in the space of urban land stewardship. The province of Ontario and its current administrators are in the midst of introducing and approving bills that result in substantial environmental de-regulation for the sake of economic growth, helping to set the stage to keep accelerating climate change rather than setting policies in place that help to mitigate it. There is also much news of environmental deregulation and the throwing out of previously established goals due to the onset of AI data centers as well. Urban land stewardship programs are increasingly shaped by intersecting socio-political and economic dynamics. Many initiatives operate with minimal institutional

oversight, reflecting a broader trend toward citizen-led environmental action driven by heightened awareness of climate change and environmental justice, for example, an organization such as the Toronto Nature Stewards that relies on citizens to steward ravines, with quite minimal day-to-day oversight from the City of Toronto. Recent global events, including the COVID-19 pandemic and movements against systemic racism and police brutality, have amplified advocacy for equity and anti-racist policy within organizations, making this an emerging priority. Concurrently, economic instability and political pressures have intensified calls for hyper-economic development, which has significantly contributed to widening the wealth gap. There is growing recognition of the qualitative benefits of nature engagement and an increased awareness of historical environmental injustices, which have spurred grassroots and DIY stewardship efforts. These disruptors, depending on how they are harnessed, can create a future where the need for equity-centered frameworks that integrate social justice, environmental sustainability, and collective care are amplified and become the norm.

K. What are the roots of the disruption - how can they be harnessed?

Figure 14 - Horizon Two - Roots of Disruptors

The roots of various disruptors are in some cases related to recent events, and in others, have been emerging for decades. Both COVID 19 and emerging technologies such as AI are leading to environmental deregulation. COVID 19 has negatively impacted the economy, and many governments are now prioritizing the economy over the environment: a very short-sighted approach - where by various bills are deregulating laws that have in the past protected transparency in environmental assessments, biodiversity, and the protection of environmentally sensitive areas and endangered species. The same is true of deregulation around water and

energy use for data centers that are used to train generative AI models, a technology that is being very widely adopted. However, factors such as climate anxiety, and much evidence surrounding the benefits of nature on health, as well as the fact that many people relied on nature for their mental health throughout COVID 19 is inspiring more action in the realm of environmental advocacy. Although there seems to be a lack of consistent support for land stewardship, as demonstrated through municipal budgeting and granting systems.

B. Causal Layer Analysis

Credited largely to the work of Sohail Inayatullah, Causal Layered Analysis attempts to deconstruct problems, looking at its many dimensions: its official cause as presented in the media, social science analysis, worldview or discourse analysis, and as myth/metaphor. The challenge is to move up and down the layers to understand how each layer is interconnected, as this tool can help to create clarity on the interrelation between different experiences and challenges, systemic factors, and personally held beliefs.
The approach used here includes a CLA for the present state, and for the future state. Inputs and approaches for the present state included desk research and data that was collected from my participants and the emerging themes and findings. The process is helpful for identifying where we are and how we got here, as well as where we want to be, and how we want to get there.

Layer	**Present**	**Future (**Healing State**)**
Litany: What we see and hear	Stewardship is a civic duty, not just a governmental responsibility. Citizens have a major role in protecting and stewarding the land that they live on. Continued economic growth and urbanization at the cost of green spaces and corridors is necessary and inevitable for people to thrive. Impact of urban land stewardship is often measured through units, not qualitative impact.	Urban land stewardship is a transformative agent that connects communities, builds resilience, creating social and ecological outcomes, and activates connectivity through relationship building and relational accountability
System: Underlying structures and	Colonial, hierarchal governance	Two eyed seeing approach

drivers	structures Historical and systemic racism in nature and environmentalism Historical and current Land ownership structures Valuing Western scientific methods over other knowledge systems Neoliberal approaches whereby responsibility for municipal responsibilities is put onto citizens	Paradigm shift to Indigenous ways of knowing - human as part of nature instead of human dominating nature Empowering approaches where citizens feel confident in caring for nature
Worldview: Beliefs and narratives shaping the system	Municipal, provincial, and federal administration that is continually focused on economic growth at the cost of the environment Colonial, Western, human centered points of view that focus on human dominating nature Historic and current (economic) residential segregation leading to environmental injustices Roots of nature preservation are rooted in colonial systems that displaced people Scarcity: no funding, no interest, no time, no passion	Prioritization of relational accountability and collective care Paradigm shift - Indigenous ways of knowing - human as part of nature instead of human dominating nature Empowering approaches where citizens and community groups lead but are supported through their processes Abundance through connection - together we can work towards meaningful change
Myth/ Metaphor: Deep stories and cultural archetypes	Myth of Environmental Equity: Everyone enjoys equal access to the healing power of nature stewardship	Abundance in relationships, reciprocity, and interconnectedness - everyone has their part in the garden

Vision for the Future

A vision of the future for Urban Land Stewardship

Our future urban stewardship system is relational, abundant, and just - powered by community autonomy, Indigenous knowledge, and long-term care. It replaces scarcity with solidarity, bureaucracy and neoliberalism with trust, and short-term outputs with intergenerational responsibility. In the future, urban land stewardship is anchored in deep, reciprocal relationships. Stewardship expands across neighborhoods and institutions, beyond private organizations and into schools, senior centres, youth programs, tenant associations, faith communities, and is seen in areas historically excluded from green infrastructure including historically redlined or racialized neighborhoods. We co-create partnerships with collaboration as a core principle. We broaden our definition of stewardship to include care for diverse habitats, culturally significant plants, food forests, and micro-restoration sites, reflecting community priorities and place-based identities. Every project has the ability to look different. Community-led projects thrive in every ward, and especially in areas that are heat vulnerable, with plant species expanding beyond those that are native, as those species have been restored. Culturally relevant herbs and spices, and climate resistant trees can also act as forage locations.

Our relationships have strengthened and shifted towards accountability, interconnectedness, and respect, with a solidifying of anti-racist practice and relational accountability. Mutual aid networks support participation (childcare, transit, language access, stipends), and ideas of reciprocity and appreciation guide care of land and community. External agencies become partners and friends, and together, and through the strength of our relationships, we cultivate abundance rather than scarcity. Whether formal or grassroots/DIY, equity is embedded in program design and resources, and we acknowledge that not everyone is coming in with the same skill set. A such, we mentor one another. We outline our shared standards of care that we learn from Indigenous World Views, including respect, reciprocity, and responsibility, in our documented and undocumented community agreements. We work with, recognize, respect and compensate for community expertise, including Indigenous knowledge keepers, racialized community leaders, and youth leaders. We embed seven-generation planning to connect with our ancestors, and to those whose ancestors we will be.

In a sense, our improved infrastructure lends itself to autonomy: We ensure that we have what we need to easily carry out our roles, especially in the areas of logistics, incrementally working towards building strong, localized enabling infrastructure—water access, tool libraries, shared storage, training supports, seed libraries, and mentors, that can make our communities confident, no matter at what point of their land stewardship journeys they are on, making us confident and self-reliant. We favor agile, community-empowering processes over bureaucracy, and we advocate from funding that lets us plan for the long term, and where relationships can be solidly prioritized. We support bottom-up ideas that help us to protect the environment without stifling initiative and innovation.

We thrive because of reciprocal learning and intergenerational and intercultural skill-sharing, in addition to embodied, land-based learning. Experienced stewards act as mentors and support newcomers, and skills are introduced to children and youth learn by doing and teaching back

through stewards working directly with schools and educational organizations, fostering a lifelong commitment to land stewardship. Knowledge circulates freely non-proprietary, open-source, and gate keeping does not occur. Mentorship pathways can potentially lead to careers that can work to change the historically colonial dynamic of the environmental sector, especially when a connection is made to those who are racialized and Indigenous.

Because of our increased commitment to nature, a new paradigm emerges: we move away from anthropomorphism towards being a part of nature, where we are accountable across seven generations. Instead of seeing green space as a commodity, we see land as a living system. We value qualitative and relational benefits: connection and care networks, but we also feel the environmental impact of our commitments. We are guided by intergenerational ethics: as in many Indigenous worldviews, we plan for seven generations ahead, and we value belonging and community support. We do work that not only benefits us, but benefits everyone in the community.

Seeds of the Future Already Seen and Felt

We are building on the seeds of the future that are already present. This future relies on what came before it: on the millennia of Indigenous stewardship and the generous sharing of Indigenous knowledge that has taken place. It is advanced by existent urban stewardship organizations committed to anti-racism, relational accountability, and systemic change, alongside citizens leading DIY projects that advocate for social impacts and community wellness. Numerous individuals and organizations are already doing the work today: Many organizations focus on anti-racism rather than inclusion alone. They are building pathways for equity-deserving individuals, shifting from tokenism and working towards changing workforce composition. Many individuals and organizations have a strong sense of shared responsibility, and the involvement of and collaboration with Indigenous peoples are helping to shift colonial views of our relationship to nature. There are many programs that focus on social good through empowerment and self-determination for healthier lives, many programs that work with youth to engage them in a life-long commitment to their awe for nature, and many community-led, grant-supported programs that promote open knowledge-sharing. The key is to retain our hope and turn it into action harnessing it into the future, rather than to resign ourselves to pessimism.

Recommendations

The following is a series of recommendations of how to get there from where we are, with so much good work being done already.

Resources, Metrics, and Deliverables

- Advocate for the importance of qualitative reporting and flexibility in deliverables as units and numbers do not tell the whole story when it comes to impact of land stewardship programs
- Tracking ecological outcomes is also important and can help to keep volunteers motivated and committed. Report these achievements to volunteers (your community) regularly).
- Allocate time and resources to develop deep, long-term relationships with volunteers, community partners, and Elders rather than focusing solely on short-term engagement, as relationships do not develop on a fiscal timeline.
- Advocate for and demonstrate the importance of funding models that prioritize ongoing support beyond initial setup, including maintenance, equipment replacement, and program continuity, as this shows a deep commitment to the volunteers that are carrying out the work.
- Albeit very challenging given the current economy and administrative priorities, address hiring freezes and budget cuts by securing dedicated funds for staffing to ensure programs are well-resourced and volunteer experiences remain positive.
- Funding is of great importance to quality of work and what can be done, and there is usually not enough funding to accomplish everything that needs accomplishing which can lead to uncertainty as to whether projects will be greenlighted.
- Budget for upkeep, not just start-up, and demonstrate the impact on projects and morale to funders.
- Educate funders on the importance of long-term investment and delayed gratification in environmental stewardship programs, emphasizing that sustained support leads to stronger outcomes and community trust. For example, investing in children's programs where they develop a deep love of nature could contribute to a greater commitment to the environment from the upcoming generation.

Highlighting Tangible Results and Inclusion

- Design programs that emphasize shared goals and visible impact to strengthen community engagement and volunteer retention.
- Emphasize the collective achievement of positive change to motivate volunteers and strengthen long-term engagement.

- Foster collaboration by creating opportunities for participants to witness tangible outcomes—such as restored areas and thriving plantings—and celebrate these changes collectively.
- Encourage repeat participation and community building by highlighting progress over time and supporting volunteers in bringing others into the initiative, as this approach can nurture a sense of belonging, purpose, and sustained commitment.
- Highlight the sense of belonging, shared purpose, and environmental impact that comes from working alongside like-minded individuals and staff.

Collaboration and Relationship Building

- Reach out to community organizations and community leaders
- Be humble and commit to relationality and relational accountability in your collaborations
- Leverage resources/knowledge to uplift others
- Engage equity deserving partnerships rather than assuming lack of interest or capacity
- Expand relationships with various organizations, for example, schools, senior centres, even businesses and those operating on privately owned land.
- Genuine engagement and relationships can lead to abundance, combatting the myth of scarcity
- Look for win-win-wins: where there is a win for the participants, for the environment, and for social good. A good example of this is the expansion of tree canopy within community house locals, creating peace gardens in elementary schools, etc.

Decolonization

- Work directly with Indigenous Elders and knowledge keepers to help unlearn colonial perspectives, and to bring into focus differing perspectives when it comes to land stewardship and care.
- Engage in collaborations with Indigenous creators and elders directly, in hopes of reclamation of space.
- Commit to practicing relational accountability and promoting it as a value rather than tokenism in connection with Elders and Indigenous and racialized people

- Provide training and development opportunities to Indigenous people through Indigenous partners that support training for unemployed or underemployed Indigenous people and provide employment opportunities for trainees whenever possible.
- Partner with organizations that are Indigenous-led on training and employment initiatives to create pathways for participation, skills development, and employment.
- Acknowledging of colonial past by connecting with racialized groups to help build authentic connections and bridges.

Anti-Racism for systemic change

- Engage racialized and equity deserving youth through mentorship programs (preferably with those who self identify as equity deserving professionals in the field) so that youth can see that urban land stewardship is a space for them.
- Establishing anti-racism work committees and working directly with racialized groups
- Training opportunities and mentorship programs that can lead to employment in this area, specifically for equity deserving - those who have been historically overlooked and underrepresented
- Commit to relational accountability with Indigenous and racialized communities to build long-term, trust based relationships rather than relationships that operate on a fiscal cycle, to help ensure meaningful representation and collaboration.
- Commit to hiring Indigenous people and people of color across all levels of the organization to reflect the diversity of the communities served.
- Set recruitment goals to increase representation of Indigenous peoples and people of colour in staff, boards, and paid roles.
- Compensate community expertise (honoraria for Elders/knowledge holders) and offer additional recognition to partners in appropriate ways.
- Operating in peripheral neighborhoods and areas can function as concrete forms of empowering, anti-racist action.

Growth

- Slow and steady growth is recommended because when you grow too quickly, you can lose connectivity and community/family feel, and may become less agile and localized.
- Taking incremental steps in expansion and growth - building up programming and services over time so that eventually you are able to be more and more inclusive - providing something for all to partake in.

- co-design with or get feedback from the community from the get-go. This could involving community members—including leaders from marginalized/equity-deserving groups—in scoping, design, and decision-making, using participatory methods to ensure that there is an actual need for the program or project that you are designing.

Creating Equitable Spaces

- Strengthen local engagement by building long-term relationships with neighborhood communities by consistently including local residents in stewardship activities, ensuring programs reflect the demographic makeup of the area.
- Prioritize inclusivity by fostering diverse participation at events and actively challenge assumptions about who “should” be doing environmental work, emphasizing equity and shared responsibility.
- Support mentorship opportunities that allow for racialized people to see themselves in the space of urban land stewardship.
- Collaborate with community groups by moving beyond one-off events, and consider co-creating programs, ensuring sustained collaboration and trust, moving towards relational accountability.
- Reflect on organizational make-up within staff and leadership thinking through how reflective it is of the demographic that works with you, and recognize how lack of diversity may be perceived and commit to systemic changes that promote equity and inclusion.
- Embed anti-racist frameworks into strategic planning, including measurable goals for diversity and inclusion in organizational policies and strategic plans, ensuring accountability and transparency in progress reporting.
- When designing programs, ensure that you are using community centered approaches, - for example, consult with the target community to confirm interest and relevance, and if possible, engage local networks to co-create initiatives that align with community priorities.
- Offer varied time commitments and roles to welcome diverse capacities, abilities, and interests.
- Plan for or provide language access, childcare, and transportation support to reduce participation barriers, if possible.
- Creating logistical ease for participants is important as this improves accessibility.

- Diversification of programming as well as location of programs may have the benefit of reaching a much broader audience - public sector and private sector, community building sector.

Importance of team dynamics (both staff and volunteer)

- Be aware of the impact of positive team dynamics and dedicate time to creating intentional strategies to build small, cohesive teams with shared goals, as strong interpersonal relationships significantly influence retention and dedication to work.
- Encourage a culture where employees and volunteers feel supported by colleagues who share their passion for environmental stewardship, recognizing that team harmony is as important as the work itself.
- Help people find their roles: what they are comfortable with and where they can use their strengths.
- Promote compassion and patience through role modelling; promote traits such as empathy, patience, and collaborative behaviors in community expectations to help ensure inclusive and respectful interactions.
- Comfort and harmony between volunteer team members contribute to the success of Land stewardship programs - a dynamic where no one person dominates and everyone plays to their strengths, and where participants bring out the strengths in one another: patience, kindness, and friendliness. Allowing people to play to their strengths and preferences can help with this. ,

Importance of Volunteer team

- Embed dignity and respect in all interactions. This involves systems commitment whereby staff will need appropriate training to work with all volunteers, anticipating needs that might arise.
- Create feedback loops and act on input (surveys and qualitative feedback)
- Demonstrating appreciation to volunteers from staff, organizations, and communities that are impacted by their work and by providing them with opportunities that they are interested in, through the tenets of reciprocity.

- Counter scarcity narratives (“not enough funding/time/interest”) by building strong relationships and by mapping existing connections and resources.
- Emphasize that stewardship is a collective effort, leveraging strengths in numbers and encouraging teamwork to achieve goals smoothly - and that each person plays a role.

Encourage and Support Empowerment

- Handing over ownership over how space is run can create a sense of empowerment in volunteers, and can allow for the emergence of natural leadership: this reduces micromanagement and allows informal leadership to emerge within volunteer groups, fostering autonomy and accountability for stewardship sites.
- Scheduling regular planning sessions with volunteers and amongst volunteers to set goals, review progress, and plan out strategies collaboratively can build a sense of self-determinism and empowerment.
- Support projects that originate from the community rather than imposing them top-down, and use ground-up approaches to develop priorities and solutions, ensuring all voices are valued and included in decision-making.
- Provide technical expertise or guidance at the beginning of a project without being heavy handed.

Limits of and Future Directions of Research

A total of 11 participants were interviewed for this research, and a total of four participants took part in the workshop. Research outcomes were therefore limited by sample size, which can often be a critical component in data saturation. Both the workshops and the interviews really offer a starting point for the exploration of the topic, and if scaled to include additional participants, additional themes would have likely emerged. As in the workshop, participants knew one another, existing relationality may have affected the results. Due to the relatively low number of participants given the timeframe of this study, the nature of the research done here is exploratory, and it may be beneficial for additional interviews and workshops to take place using the same data gathering tools, as additional themes and finding would likely emerge.

Another limitation of the study is that it is inherently difficult to carry out Participatory Action Research under the constraints or Research Ethics Board approval, specifically in the area of research question co-creation, as typically a research question needs to be part of the REB

application submission process, and you are typically cannot begin interaction/research until the Research Ethics Board approves your application, creating a bit of a chicken and egg scenario. However, it is still possible to carry out research that impacts positively the community that is contributing feedback and identifying pain points.

This study acknowledges the possibility of personal bias influencing the research process, including data interpretation, participant interaction, and thematic analysis. There is an auto-ethnographical component to this study with my reflections throughout, and personal bias may have entered into the analysis of both the primary and secondary research. Even with numerous measures in place, it is difficult to completely eliminate researcher bias. As such my perspectives and experiences may have shaped certain decisions, which affect the objectivity and generalizability of the findings.

Many of the emerging themes of this study focus on topics that are difficult to measure such as the reflective impact of relational accountability, collective care, and reciprocity within urban land stewardship, and these themes can act as jumping off points for further study. Additional areas of research could focus on how to best advocate for urban land stewardship using its qualitative impact, how collective care can be further amplified through the action of urban land stewards, and what long-term impacts this collective care holds.

Conclusion

The health of the land impacts everyone who lives on it. Throughout the process of this research journey, it became clear that even though urban land stewardship - the actions, collective or individual, for a variety of reasons, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of a variety of outcomes - goes far beyond having merely a positive impact on the land or environment that is being protected. The process can contribute to collective care, as it is not just the land stewards that are benefitted or impacted by their own work, but rather, everyone who has access to that particular space or service in a given area, including non-human actors, highlighting our mutual dependencies and intrinsic values. Urban land stewardship, as it is so often a collaborative initiative undertaken by more than one individual, can be seen as an example of what Tronto describes as “caring together:” mobilizing together to transform and improve our world, not just for ourselves, but for everyone, helping us to build collective care, that Wrigley et al. (2024) describes highly political work that helps to push social change, helping us to survive and support one another collectively.

Although much has already been written regarding urban land stewardship, including neoliberal critiques and its potential limitations, the themes emerging from the methods used here is that urban land stewardship has much potential and impact in the realm of prioritizing collective care, relationship building, relational accountability, and reciprocity. Although numerous barriers exist that emerge from systems that reinforce environmental injustice, what also emerges from the data is that there is work being done today that can combat current

systemic injustices and help us to build relational accountability, although admittedly there is much work that needs to happen, and we also have to ensure that we harness the various disruptors of the current model and allow them take us into the future. Insights generated from semi-structured interviews as well as a desire-based, Three-Horizons workshop and the resulting causal layer analysis shows us a self-determined, highly relational future where a paradigm shift has taken place: where humans are part of nature, and live in reciprocity with our non-human actors, where we practice relational accountability, and where we refute the myth of scarcity, instead building abundance through our relationships and our accountability to one another.

We have the ability to create systemic change when we move away from tokenism, and instead think longterm. This was seen in many existing initiatives described throughout my conversations. Some characteristics connecting these initiatives is the need for planning beyond this generation. For example, providing mentorship and training to racialized youth and young adults, and providing opportunities where they can see themselves in the space of land stewardship, so that they can eventually shift the make-up of the profession. Planting seeds of love for nature and exposing them to its benefits in children can also lead to systemic change, as their experiences will shape how they act and advocate for nature. We are being inundated with studies demonstrating the health benefits of nature - a recent study coming out of Harvard shows that children 4 to 6 years old that lived close to green space demonstrated less hyperactive behavior and scored more highly on attention and visual memory testing measures compared with children who did not, and there is also evidence that just seeing trees has benefits for mental health (Armand, 2024), which again, emphasizes the importance of environmental justice, and the impact that the creation of green spaces can have. It seems reasonable then to say that given the evidence for environmental and social good, it would be to the benefit of all levels of government to invest in land stewardship. There is much evidence that can be used for advocacy as well. Systemic change could also result in reduced need for health care and social services spending, as long term access and exposure to green spaces clearly has positive health benefits.

I was reminded and humbled throughout this study by the power that nature holds, and my relationship and connection to the land that I help steward and care for, as well as the environment around me has definitely changed and intensified. I have learned so much from the process and those who shared with me in such an honest and vulnerable way, and it has strengthened my commitment to this work. It has also helped me to envision a brighter future. I hope to continue creating rich dialogue on the topic surrounding urban land stewardship, committing my time to it, and hopefully contributing to a dynamic and fruitful future.

Bibliography

Adams, W. C. (2015). Conducting Semi-Structured Interviews. In K. E. Newcomer, J. S. Wholey, & H. P. Hatry (Eds.), *Handbook of Practical Program Evaluation* (pp. 492–505). John Wiley & Sons, Inc. https://doi.org/10.1002/9781119171386.ch19

Andersson, E. (2021). “Reconnecting cities to the biosphere: Stewardship of green infrastructure and urban ecosystem services” - where did it come from and what happened next?: This article belongs to Ambio’s 50th Anniversary Collection. Theme: Urbanization. *Ambio*, *50*(9), 1636–1638. https://doi.org/10.1007/s13280-021-01515-z

Armaud, W. (2024, April 19). *How do trees and green spaces enhance our health?* Harvard Health. https://www.health.harvard.edu/blog/how-do-trees-and-green-spaces-enhance-our-health-202404193034

Aschaiek, S. (2021). University of Toronto Mississauga. *Drawing on Indigenous Wisdom to Become Ecological Citizens: 2021 Snider Lecture*. https://www.utm.utoronto.ca/main-news/drawing-indigenous-wisdom-become-ecological-citizens-2021-snider-lecture#

Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, *2*(4), 331–340. https://doi.org/10.1007/s13412-012-0086-8

Bennett, N. J., Whitty, T. S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S., & Allison, E. H. (2018). Environmental Stewardship: A Conceptual Review and Analytical Framework. *Environmental Management*, *61*(4), 597–614. https://doi.org/10.1007/s00267-017-0993-2

Blakely, G. (2021). How Neoliberalism Created a Society of Individuals. *The Tribune.* Retrieved January 2, 2026, from https://tribunemag.co.uk/2021/01/how-neoliberalism-created-a-society-of-individuals

Bodnar, J. (2015). Reclaiming public space. *Urban Studies (Edinburgh, Scotland)*, *52*(12), 2090–2104. https://doi.org/10.1177/0042098015583626

brown, adrienne maree. (2017). *Emergent strategy: Shaping change, changing worlds*. AK Press.

brown, adrienne maree. (2021). *Holding change: The way of emergent strategy facilitation and mediation* (First edition.). AK Press.

Budd, J. (2001). *Knowledge and knowing in library and information science: A philosophical framework*. Scarecrow Press.

Buijs, A. E., Mattijssen, T. J., Van der Jagt, A. P., Ambrose-Oji, B., Andersson, E., Elands, B. H., & Steen Møller, M. (2016). Active citizenship for urban green infrastructure: Fostering the diversity and dynamics of citizen contributions through mosaic governance. *Current Opinion in Environmental Sustainability*, *22*, 1–6. https://doi.org/10.1016/j.cosust.2017.01.002

Campbell, L. K., Svendsen, E., Johnson, M., & Landau, L. (2022). Activating urban environments as social infrastructure through civic stewardship. *Urban Geography*, *43*(5), 713–734. https://doi.org/10.1080/02723638.2021.1920129

Connolly, J. J., Svendsen, E. S., Fisher, D. R., & Campbell, L. K. (2013). Organizing urban ecosystem services through environmental stewardship governance in New York City. *Landscape and Urban Planning*, *109*(1), 76–84. https://doi.org/10.1016/j.landurbplan.2012.07.001

Conway, D. T., & Scott, J. L. (2020). *URBAN FORESTS IN A CHANGING CLIMATE*. https://d3n8a8pro7vhmx.cloudfront.net/greenbelt/pages/14604/attachments/original/1600457503/UrbanForestsChangingClimate_REPORT_E-ver_REV.pdf?1600457503

Cull, I., Hancock, R. L. A., McKeown, S., Pidgeon, M., & Vedan, A. (2018a). *Decolonization and Indigenization*. https://opentextbc.ca/indigenizationfrontlineworkers/chapter/decolonization-and-indigenization/

Cull, I., Hancock, R. L. A., McKeown, S., Pidgeon, M., & Vedan, A. (2018b). *Indigenous Ways of Knowing and Being*. https://opentextbc.ca/indigenizationfrontlineworkers/chapter/indigenous-ways-of-knowing-and-being/

Daniel, R. (2019, December 5). Understanding Our Environment Requires an Indigenous Worldview. *Eos*. https://eos.org/opinions/understanding-our-environment-requires-an-indigenous-worldview

DEARBORN, D. C., & KARK, S. (2010). Motivations for Conserving Urban Biodiversity. *Conservation Biology*, *24*(2), 432–440. https://doi.org/10.1111/j.1523-1739.2009.01328.x

Derrida, J. (with Roudinesco, E.). (2004). *For what tomorrow--: A dialogue*. Stanford University Press.

Dickinson, E. (2013). The Misdiagnosis: Rethinking "Nature-deficit Disorder." *Environmental Communication*, *7*(3), 315–335. https://doi.org/10.1080/17524032.2013.802704

Dolan, J., & Zhao Ni, Y. (2024). *High Park | Greenbelt Indigenous Botanical Survey*. https://gibsurvey.ca/site/high-park

Egmose, J., Gleerup, J., & Nielsen, B. (2020). Critical Utopian Action Research: Methodological Inspiration for Democratization? *International Review of Qualitative Research*, *13*, 194084472093323. https://doi.org/10.1177/1940844720933236

Fischer-Lescano, A. (2020). Nature as a Legal Person: Proxy Constellations in Law. *Law and Literature*, *32*(2), 237–262. https://doi.org/10.1080/1535685X.2020.1763596

Ghose, R., & Pettygrove, M. (2018). Urban community gardens as new spaces of living. In *The Routledge Handbook on Spaces of Urban Politics* (1st ed., Vol. 1, pp. 320–335). Routledge. https://doi.org/10.4324/9781315712468-33

Government of Ontario. (n.d.). *Bill 5, Protect Ontario by Unleashing our Economy Act, 2025—Legislative Assembly of Ontario*. Retrieved January 2, 2026, from https://www.ola.org/en/legislative-business/bills/parliament-44/session-1/bill-5

Harvey, D. (2007). *A brief history of neoliberalism*. Oxford University Press.

Holt Giménez, E., & Shattuck, A. (2011). Food crises, food regimes and food movements: Rumblings of reform or tides of transformation? *Journal of Peasant Studies*, *38*(1), 109–144. https://doi.org/10.1080/03066150.2010.538578

Jafri, B. (2009). Rethinking "Green" Multicultural Strategies. Speaking for Ourselves: Environmental Justice in Canada. Eds Julian Agyeman, Peter Cole, Randolph Haluza-DeLay and Pat O'Riley.

Jermé, E. S., & Wakefield, S. (2013). Growing a just garden: Environmental justice and the development of a community garden policy for Hamilton, Ontario. *Planning Theory & Practice*, *14*(3), 295–314. https://doi.org/10.1080/14649357.2013.812743

Keefe, K. (2018). *Indigenous History of Today's High Park—High Park Nature*. https://highparknature.org/article/indigenous-history/

Kimmerer, R. W. (2018, November 26). Tallgrass by Robin Wall Kimmerer. *Little Toller Books*. https://www.littletoller.co.uk/the-clearing/tallgrass-by-robin-wall-kimmerer/

Kimmerer, R. W. (2020). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants* (Second hardcover edition.). Milkweed Editions.

Łaszewska-Hellriegel, M. (2023). Environmental Personhood as a Tool to Protect Nature. *Philosophia (Ramat Gan)*, *51*(3), 1369–1384. https://doi.org/10.1007/s11406-022-00583-z

Leitão, R. (2020). *Pluriversal design and desire-based design: Desire as the impulse for human flourishing*. In: DRS Pluriversal Design SIG, 4 Jun 2020, New Orleans, USA. Available at http://openresearch.ocadu.ca/id/eprint/3180/

Lima, J. (2021). Introducing Relationality to Design Research. *Dismantling/Reassembling Tools for an Alternative Future*. Pivot 2021, Toronto.https://dl.designresearchsociety.org/cgi/viewcontent.cgi?article=1087&context=pluriversaldesign

McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. *Local Environment*, *19*(2), 147–171. https://doi.org/10.1080/13549839.2012.752797

Metcalf, S. S., Svendsen, E. S., Knigge, L., Wang, H., Palmer, H. D., & Northridge, M. E. (2016). Urban Greening as a Social Movement. In *Urban Sustainability: Policy and Praxis* (Vol. 14, pp. 233–248). Springer International Publishing AG. https://doi.org/10.1007/978-3-319-26218-5_15

Miller, J. R. (2005). Biodiversity conservation and the extinction of experience. *Trends in Ecology & Evolution*, *20*(8), 430–434. https://doi.org/10.1016/j.tree.2005.05.013

Nelson, M. K. (2008). *Original instructions: Indigenous teachings for a sustainable future*. Bear & Company.

Noel, L.-A. (with Lovelace, C.). (2023). *Design social change: Take action, work toward equity, and challenge the status quo* (First edition.). Ten Speed Press.

Ogawa, T. (2009). *Looking at community gardens through neoliberal lenses* (Vol. 48, Issue 3, p. 1433) [ProQuest Dissertations & Theses]. https://www.proquest.com/docview/304905815?pq-origsite=primo

Parks, Forestry and Recreation. (2013). *Every Tree Counts—A Portrait of Toronto's Urban Forest*. City of Toronto. https://www.toronto.ca/wp-content/uploads/2017/12/92de-every-tree-counts-portrait-of-torontos-urban-forest.pdf

Peck, J., & Tickell, A. (1994). Jungle Law Breaks out: Neoliberalism and Global-Local Disorder. *Area (London 1969)*, *26*(4), 317–326.

Reed-Danahay, D., (2019). Autoethnography, In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, & R.A. Williams (Eds.), SAGE Research Methods Foundations. https://doi.org/10.4135/9781526421036815143

Reeves, S., Peller, J., Goldman, J., & Kitto, S. (2013). Ethnography in qualitative educational research: AMEE Guide No. 80. *Medical Teacher*, *35*(8), e1365-1379. https://doi.org/10.3109/0142159X.2013.804977

Rigolon, A., & Gibson, S. (2021). The role of non-governmental organizations in achieving environmental justice for green and blue spaces. *Landscape and Urban Planning*, *205*, 103970-. https://doi.org/10.1016/j.landurbplan.2020.103970

Romolini, M., Brinkley, W., & Wolf, K. L. (2012). *What is urban environmental stewardship? Constructing a practitioner-derived framework* (PNW-RN-566; p. PNW-RN-566). U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. https://doi.org/10.2737/PNW-RN-566

Ryan, R. M., & Deci, E. L. (2000a). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*.

Ryan, R. M., & Deci, E. L. (2000b). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Schell, C. J., Dyson, K., Fuentes, T. L., Des Roches, S., Harris, N. C., Miller, D. S., Woelfle-Erskine, C. A., & Lambert, M. R. (2020a). The ecological and evolutionary consequences of systemic racism in urban environments. *Science*, *369*(6510). https://doi.org/10.1126/science.aay4497

Schell, C. J., Dyson, K., Fuentes, T. L., Des Roches, S., Harris, N. C., Miller, D. S., Woelfle-Erskine, C. A., & Lambert, M. R. (2020b). The ecological and evolutionary consequences of systemic racism in urban environments. *Science (New York, N.Y.)*, *369*(6510), eaay4497. https://doi.org/10.1126/science.aay4497

Scott, J. L., & Tenneti, A. (n.d.). *ENGAGING YOUTH OF COLOUR IN NATURE-BASED ACTIVITIES*.

Scott, J. L., & Tenneti, A. (2021). Engaging Youth of Colour in Nature-Based Activities. *Nature Canada*. https://naturecanada.ca/wp-content/uploads/2021/04/Race-Nature-in-the-City-Report.pdf

Scott, J. L., & Tenneti, A. (2024a). Race in nature stewardship: An autoethnography of two racialised volunteers in urban ecology. *Environmental Research. Ecology*, *3*(3), 35006-. https://doi.org/10.1088/2752-664X/ad7033

Scott, J. L., & Tenneti, A. (2024b). Race in nature stewardship: An autoethnography of two racialised volunteers in urban ecology. *Environmental Research. Ecology*, *3*(3), 35006-. https://doi.org/10.1088/2752-664X/ad7033

Scott Thomas, D. (2022a). Applying “one dish, one spoon” as an Indigenous research methodology. *AlterNative : An International Journal of Indigenous Peoples*, *18*(1), 84–93. https://doi.org/10.1177/11771801221087864

Scott Thomas, D. (2022b). Applying *One Dish, One Spoon* as an Indigenous research methodology. *AlterNative: An International Journal of Indigenous Peoples*, *18*(1), 84–93. https://doi.org/10.1177/11771801221087864

Section 1: What is TI? | *Transformative Inquiry*. (n.d.). Retrieved December 31, 2025, from http://www.transformativeinquiry.ca/TIbook/c1/c1/c1s1.html

Soga, M., & Gaston, K. J. (2016). Extinction of experience: The loss of human–nature interactions. *Frontiers in Ecology and the Environment*, *14*(2), 94–101. https://doi.org/10.1002/fee.1225

Stone, C. D. (1985). *"Should trees have standing?" revisted [i.e. Revisited]: How far will law and morals reach? : A pluralist perspective*.

Tabernero, C., & Hernández, B. (2011). Self-Efficacy and Intrinsic Motivation Guiding Environmental Behavior. *Environment and Behavior*, *43*(5), 658–675. https://doi.org/10.1177/0013916510379759

The Care Collective (with Chatzidakis, A., Hakim, J., Littler, J., Rottenberg, C., & Segal, L.). (2020). *The care manifesto: The politics of interdependence*. Verso Books.

Tuck, E., & Wayne Yang, K. (2021). Decolonization is not a metaphor. *Tabula rasa (Bogotá, Colombia)*, *38*, 61–111. https://doi.org/10.25058/20112742.n38.04

Ward, C. (2020). *Toronto's low-income and racialized communities have fewer trees: U of T researchers | University of Toronto*. https://www.utoronto.ca/news/toronto-s-low-income-and-racialized-communities-have-fewer-trees-u-t-researchers

Weir, K. (2020). *Nurtured by nature*. Https://Www.Apa.Org. https://www.apa.org/monitor/2020/04/nurtured-nature

Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood Pub.

Appendices

Appendix A

Participatory Workshop - Mapping the Three Horizons of Urban Land Stewardship

Introduction: **5 – 10 mins**

This workshop is an opportunity to jointly explore nature-based futures that support wellbeing and collective care in the context of urban land stewardship programs. By participating in these activities, we can become aware of and work towards potential transformative change through a richer and more connected understanding of our desired future in this area.

By exercising collective imagination, I am aiming to identify elements of alternatives in the present, and pathways towards desired futures.

- Refresher on informed consent form (signed prior to participations)
- Refresher on expectations around confidentiality

Creative Exercise 1: 30 - 40 mins

Purpose: Creative activities will allow us to express our ideas visually and through storytelling. This approach can sometimes help to surface thoughts that may not emerge verbally through interviews or even discussions.

Suggestions:

- Write a postcard/reflection/create a drawing to yourself/for yourself from the future, specifically about your work/involvement with the program: 2035
- Draw a picture showing the future of urban land stewardship - specifically how you would like to see it
- Write a letter describing urban land stewardship in 2035

Prompting questions:

1. Is there anything that will stay the same?
2. What does volunteering look like? What is flourishing and why? What do you love about it?
3. What are some of the benefits you are feeling in this future?
4. What are the challenges?
5. What has changed – what looks different?
6. What is inspiring to you?

Use your senses to think through your descriptions.

Required supplies

- Paper/postcard cards
- Pens
- Pencils/Pencil Crayons

Share your ideas and stories.

Quick Break – 5- 10 mins

Three-Horizons exercise – 45 – 50 mins
In two groups (or if small, one group), we will be working through a series of questions that will help us identify where we are and where we want to go.

We will answer the following questions:

1. What is our ideal vision for the future?

2. What are we doing now that are pockets of the future in the present?

3. What is not working today?

4. What are we doing currently that we may be working now, but may not be taken into the future?

5. Elements of the current system that can reuse or revamp

6. Elements of the current system/program that we need to sustain and take with us into the future

Required supplies

- Large paper
- Post-its
- Markers

Thanks and closing remarks:

- Thank everyone for participation
- Indicate that I will report back after analysis takes place
- Indicate where to direct questions or concerns

Appendix B: Three Horizons Ideation

2025 ---------- 2035

Disruptions/Innovations

Present Challenges

Desired Vision of the Future

B. How did we get here

Colonial, hierarchal structures | Whiteness in nature and environmentalism | Historical and current Land ownership structures | Political administrations priorities focused on growth

Roots of nature conservation are rooted in colonial systems | Colonial, human-centered points of view | Residential segregation leading to environmental injustices | Asking western scientific methods from other knowledge systems

Emphasis on Western systems of knowing (Carnivore, etc.) | Poverty and unequal division of resources | Power dynamics and priorities of decision makers

E. What is the future that we want to bring about

H1

Business as Usual

Prominence

A. What is happening today

A variety of different opportunities are available | Relying on private sector for socialization and financial support | Sense of blended perspectives, knowledge to achieve goals | Programs are often available first to lack of secure funding | Funding is not guaranteed relying on short-term grant systems

DIY groups are taking things in their own hands and work in local locations | Focusing on a narrow set of approaches | Continuum oversight to some extent, missing opportunities for systemic change to address root causes | Lack of communication/ consistent funding from provincial bodies | In many cases there is focus on capacity and resources to work in the short-term

Environmental processes that source difficult to measure are not appreciated or prog ams | Inequitable access to participation due to underlying systemic issues | Variety of opportunities on offer, but not always in line with community priorities and needs, and collaborative governance | Capitalism approaches destructing to environment and people, only focus on results & funding

H3

J. What is being disruptive?

Disruptors

Extreme environmental de-regulation by current administrations for the sake of economic growth | Climate change is accelerating | Emerging technologies responsible for acceleration of climate change | Programs that are powered by citizens with little oversight

Increased advocacy for the environment due to greater awareness around climate change | Increased advocacy for social injustices, Environmental Justice as a result of recent events (Police brutality, Covid) | Organizations moving towards anti-racist work and policy resulting from greater awareness around historical injustices | Depressed economy resulting from COVID and political factors

Pushes for hyper-economic development in the province | Recognized value of qualitative benefits of time spent in nature | Greater awareness of historical environmental atrocities resulting in greater number of DIY initiatives | Increasing wealth gap

C. What do we believe is failing

Relying on only quantitative measures for success | Linking quantitative metrics to funding | Programming that is reliant on colonial relationships to the land

Human centred approach rather than a nature centred approach | Too much oversight | Lack of committed support from governing bodies

H2

Inspirational Practices in the Present

K. What are the roots of the disruption and how can they be harnessed

Technological advances and AI as a marketable tool | Linking quantitative metrics to funding | Growing awareness of colonial past and present

Late stage capitalism | Covid 19 as an economic disruptor | Lack of committed support from governing bodies and handing responsibility down to citizens

Neoliberalism | Emerging evidence of the link between health and nature (felt during COVID 19) | Climate Anxiety

F. What are the seeds of the future available in the present

Seeds of the Future in the Present

Mentorship opportunities exist for status quo stewards | Internal change for employment strategy and investment and training programs | Those who participate in programs have a connection to community and commitment | Building awareness of land that we (settlers) are occupying | Shifts from diversity to anti-racism work by land stewardship organizations | A shift towards anti-racist policies from those that focus on diversity | Prioritizing neighbourhoods that have been disinvested in for planning or improvements

Mentorship opportunities for those that are equity deserving | Many people who have leisure time chooses to use it for land stewardship | Programs that support but also empower participants | Niche community based, grant based initiatives | Amplification of Indigenous Ways of Knowing through workshops with Elders and Indigenous peoples | Non-proprietary knowledge sharing already exists | Tree equity becoming a priority

Programs that are rooted in Western ways of knowing and siloed in nature, and which do not acknowledge the importance of connectedness to land, community, and other non-hierarchical scales | Programs that implement Indigenous Ways of Knowing and Being, but which are superficial in nature | Continued love for/and appreciation for the land | Work being done on the qualitative power of being in nature | Commitment to learning about environment and nature | DIY based initiatives

G. Whose work are these present possibilities build upon: whose work, vision, culture

Who is driving the future seeds

Well established urban land stewardship organizations | Indigenous people who have been stewarding the land for millennia | Citizens undertaking DIY and collaborative projects using anti-racist, pro TRC approaches

Those using non-quantitative metrics to describe impact of programs | Activists working towards greater attention and advocacy for these spaces | Policy developers and organizations (NGOs and others) working towards greater attention and advocacy for these spaces

Scale and spread

H. How can they be scaled and spread - give examples of actors already working in this space

Tapping into motivations through building of community | Focus on relationship building | Empowering those that have the knowledge to reduce bureaucracy

Move toward anti-racist policies, knowing that mistakes may be made along the way | Focus on Environmental Justice and Equity through empowerment, when possible | Focus on Empowerment

What is valuable about the system that we want to retain

D. Is there anything valuable about the old system that we would like to retain, for example, infrastructure

Workshops and acquiring knowledge based on Indigenous Knowledge working directly with Indigenous People | Loopholes where bureaucratic processes can be reduced or avoided | Shifts from strategic goals based on diversity for inclusion to a shift to anti-racist goals

Building mentorship and employment opportunities for equity deserving groups | Working directly with Indigenous and other equity deserving partners to gain experience and change the demographic make-up of those in this field | Working directly with Indigenous and BIPOC people to leverage resources for mutual aid and benefit

Programs that are focused on empowering people | Programs/initiatives that allow for the blossoming of long-term relationships | Programs that allow for one-off opportunities as well

Time

H1

Systemic integration of knowledge building so that we all have an understanding of what needs to be done to prevent the land | Active contribution to supplies | Building out towards infrastructure that facilitates work

Self reliance - people take care of the land because they have autonomy and knowledge | Infrastructure | Steady, built-in sources of funding not strongly contingent on deliverably type

Limited oversight and bureaucracy | Expanded funding opportunities with a shift in mindset around deliverables and timelines, and statistics | Built in budgets with allocation rights to what is most needed

Expansion of types of plants as well, and fables of alone that are planted and stewarded | Expansion of growth beyond private partnerships to host stewardship opportunities | Leveraging resources to lift each other up

Growth in extent of workseas where stewardship happens | Relational Growth | Development of broader partnerships (schools, senior community centres, youth programs, etc)

Reach to areas that are now unfairly overlooked - especially those in poor areas, to further environmental justice concerns | Community based initiatives (community housing, community partnerships, but may not be land stewardship focused)

Spirit of care and understanding towards one another through community building | Anti-racist approaches as a strategic priority | Commitment to mutual aid: Caring for ourselves and one another

Creating a sense of community through mutual commitment and through shared goals and values | Shift of Relationships | Partnerships rather than reliance

Friendship between stewards | Relationship with and to the land | Genuine engagement can lead to abundance

Longterm remediating of land | Urban Green space is for everyone | Local seed banks and exchanges to spread practices and help people get started

Kids and adults playing with for embodied learning for a better understanding of and connection to nature, and environment of learning (outdoor school, park) | Knowledge and Aid Exchange | Growth of various plants for pollination but also for food

Contribution to foraging and food forests

What away from human-centered thinking: Rather than dominating the land, people see themselves as belonging to the land - Nature is seen as part of a healthy city - moving from hygienic city to a sustainable city | A shift in metrics from quantitative to qualitative: measuring the inevitable impacts of urbanland stewardship

Shifting away from capitalistic values: A shift away from monetary values for monetary returns | Shift of Perspective | Integrating Indigenous Ways of Knowing and commiting to the idea of planning for seven Generations

A shift in localized accountability: we are all responsible for caring for the land immediately adjacent to us | Urban greenery moving away from commodity to living system requiring care