The Trumpeter

Journal of Ecosophy



Guerrilla Gardening in a Time of Ecological and Social Crisis: An Exploratory Endeavor to Feel Connected with a Lost Piece of Forest

Margaretha Häggström and Mårten Häggström

Volume 40, Number 1, 2024

URI: https://id.erudit.org/iderudit/1113556ar DOI: https://doi.org/10.7202/1113556ar

See table of contents

Publisher(s)

Athabasca University Press

ISSN

0832-6193 (print) 1705-9429 (digital)

Explore this journal

Cite this article

Häggström, M. & Häggström, M. (2024). Guerrilla Gardening in a Time of Ecological and Social Crisis: An Exploratory Endeavor to Feel Connected with a Lost Piece of Forest. *The Trumpeter*, 40(1), 73–97. https://doi.org/10.7202/1113556ar

Article abstract

This four-year explorative study is located in a nearby forest, or more accurately a clearcut, in the western part of Sweden. The objective is to contribute to existing knowledge about forest gardening by exploring a forest milieu without trees in the Northern Hemisphere where the conditions are poor. The aim is to support biodiversity in the short term and to find out whether we could cultivate root vegetables, potatoes, and summer flowers in this nutrient-poor and shadowless environment. The study has an eco-philosophical approach that promotes eco-pedagogy and environmental education and a pragmatic pedagogical approach that adopts a "learning-by-doing" belief. The exploration is underpinned by collaborative autoethnography, and the research is conducted in and through practice. The findings show that a planting project in a clearcut requires a lot of preparation and planning and that it is possible to use a clearcut to grow potatoes, peas, and some summer flowers without special efforts, but hard to grow other crops such as vegetables and root vegetables. The project implies that the planting activities in a clearcut may have a deep impact on people's sense of human-nature identity and respect for the natural environment.

© Margaretha Häggström and Mårten Häggström, 2024



This document is protected by copyright law. Use of the services of Érudit (including reproduction) is subject to its terms and conditions, which can be viewed online.

https://apropos.erudit.org/en/users/policy-on-use/



Érudit is a non-profit inter-university consortium of the Université de Montréal, Université Laval, and the Université du Québec à Montréal. Its mission is to promote and disseminate research.

https://www.erudit.org/en/

Guerrilla Gardening in a Time of Ecological and Social Crisis: An Exploratory Endeavor to Feel Connected with a Lost Piece of Forest

Margaretha Häggström and Mårten Häggström

Introduction

There is a small hilly part of a forest area in the western region of Sweden. We have frequented this place for the past eleven years for two main reasons. First, Mårten Häggström decided to have a dog who requires long qualitative walks in suitable environments. Second, Margaretha Häggström secured a PhD position and chose this forest for some of her studies. It takes only thirty minutes for us to reach this location although it involves an uphill walk for most of the way. This particular place can be described as an "in-between space": a mini plateau with a small gravel road on one side and a very narrow forest track on the other. This in-between space used to be a grassy path between the gravel road and the forest track. On the right side of this plateau was a coppice next to a small stream. On the left side, a hilly forest slope, mainly spruce forest. However, in the last year, both sides have lost their trees, and what remains is a clear-cut. Forest residues, such as stumps, twigs, and bark, cover the area. There is almost no greenery left with few blueberry bushes remaining, and the ground is covered with branches and sticks making it difficult to walk through. In five or six years, it will probably start to recover. But in the meantime, it looks like a wound created by human hands. So, we thought that we could assist nature a little bit. This article describes the philosophical ideas behind our project, the actions we performed, and the outcomes.



Image: The clearcut. Margaretha Häggström, 2020, photograph.

The study is motivated by two distinct driving forces shaped by Häggström and Häggström's individual interests. Mårten, a student gardener, is particularly passionate about eco-friendly, self-sustaining gardening and biodiversity. His expertise in gardening and plant knowledge is supplemented by insights gained from fellow practitioners including online sources such as YouTube videos and various TV documentaries. Margaretha, with a background in pedagogy, focuses on education about sustainability, plant blindness, and the aesthetic experiences of being in the forest (Häggström 2019b). Her knowledge is primarily grounded in pedagogical theories and related disciplines. Drawing inspiration from studies indicating that students are more motivated by individuals who share similarities with them (Shin, Ranellucci, and Roseth 2017), our aim is to combine Häggström and Häggström's experiences, knowledge, and practices. This collaborative approach is envisioned as a potential contribution to near-peer teaching given that peers often play a crucial role in students' identification processes. By combining the two unique perspectives, we intend to both broaden and challenge our existing understanding and foster mutual learning within the context of the study's natural environment.

The objective of this paper is to enhance current knowledge regarding forest gardening, specifically within a treeless forest milieu in a clear-cut area in the northern hemisphere characterized by poor ecological conditions. This experiential and explorative study is guided by two questions: first, which activities can promote biodiversity in the short term within this small

clear-cut considering the absence of land ownership? Second, is it feasible to cultivate potatoes, vegetables, or flowers in this particular location?

While this study may be perceived as related to guerrilla gardening, its focus is not on guerrilla gardening intrinsically. Instead, our interest stems from two interconnected perspectives. First, our emotional reactions upon discovering the clear-cutting of trees; and second, our need for a positive and constructive project when the Covid-19 restrictions limited our activities starting in spring 2020. Faced with the challenges of both the clearcut and the pandemic, rather than succumbing to negative emotions, we chose to reclaim the clear-cut and turn it into a positive experience reminiscent of its past state. The study is fuelled by curiosity, a sense of empowerment, and agency. It is important to note that our agenda differs from that of general guerrilla gardeners as we are situated not in a city or suburb but in a nearby forest.

The article is structured in six parts. It starts with a background, exploring early ideas of land use for cultivation, ownership, and the concept of "bewildering" from a Western perspective. The transformation of land into property, as highlighted by Atleo and Boron (2022), has historically been a Western approach to claiming land in contrast to the foreground figures discussed in this article who claim land within the framework of Western legislation. A notable distinction between these figures and Indigenous communities lies in the fact that the former did not originally inhabit the land, and the land was not stolen from them. The next section of the article elucidates concepts that are central to the study's specific environment and location. Following this, the article presents the underpinning philosophical and pedagogical ideas that guide the study. Subsequently, the experiential and exploratory method is introduced, addressing ethical concerns and providing a detailed description of the context and location of the study. Moving forward, the results of the study's immersion in the forest are presented chronologically, complemented by photographs for illustration. Finally, the article concludes with a discussion.

Background and Early Ideas

The act of cultivating a piece of land without legal rights is known by various terms such as guerrilla gardening, Avant gardening, green activism, or bewildering (Hardman et al. 2018; Adams, Hardman and Larkham, 2015; Crombie 2014; McKay 2011; Reynolds 2008). The motivations for engaging in such actions vary widely and may include political purposes related to land rights and ownership, to a desire to enhance the aesthetics of a place, to add meaning to life, for recreational purposes, and for food harvesting.

The concept of bewildering, as asserted by Crombie (2014), originates from an old phrase denoting a connection to life, the source, and the spirit of life. Crombie's philosophy revolves around the intention to "beautify" and "bewilder" abandoned areas, fostering a connection

between people and plants by providing the opportunity to be immersed in nature. Bewildering, in this context, is about creating space in our lives for wildlife to coexist with us. Crombie contends that bewildering goes beyond mere planting; it represents a profound human response to our relationship with the natural environment, defining our place in it, and acknowledging our inherent sense of responsibility. However, Adams, Hardman and Larkham (2015) highlight a contrasting perspective, emphasizing that guerrilla gardeners not only take possession of land without permission but also often show little regard for those surrounding the space. Their study on public perceptions of various informal gardening projects reveals that, while many support these projects for improving aesthetic aspects, guerrilla gardening can have adverse effects on the communities surrounding the colonised sites.

The idea of using common land is not a new one. In the mid-1600s, Gerrard Winstanley, an English political philosopher and activist, led a group known as "The True Levellers." They occupied common land which had been privatized to plant crops (Corns, Hughes, and Loewenstein 2010). Winstanley (1648) expressed his critical views on ownership in the pamphlet *The New Law of Righteousness*, stating, "The whole earth of trading is generally become [*sic*] the neat art of thieving and oppressing fellow-creatures, and so lays burdens upon the Creation, but when the earth becomes a common treasury, this burden will be taken off" (188).

In the early 1800s, Johnny Chapman utilised pieces of land outside several towns to cultivate apple trees in the Northwest of the United States (Means 2012). Known for his eccentric yet kindhearted and generous nature, Chapman was a genuine pacifist and environmentalist. Influenced by the writings of the Swedish scientist and mystic Emanuel Swedenborg, Chapman's activities were grounded in social responsibility, kindness towards others, and a deep connection to nature. Communing with birds and animals, he established nurseries dedicated to growing apple trees. Described as a missionary, Chapman travelled across the western United States sowing apple seeds (Aron 2020).

In the early 1970s, Elisabeth Christy introduced the concept of "urban guerrilla gardening" by initiating a green movement in New York City. She transformed a vacant lot into a small park in East Village, marking the beginning of a broader community garden movement in the city and beyond (Palamar 2010). This was a starting point for other community gardens in the city, all over the U.S., and elsewhere. Christy's philosophy encompassed art, urban planning, botany, gardening, and landscaping. Driven by the goal of enhancing the environment, in 1973, she organised the Green Guerrillas to promote a communal practice working toward beauty against urban disarray. Serving as the first Director of the Open Space Greening Program within the New York City Government's Council on the Environment, her primary objective was to convert abandoned lots in the city into gardens. The group also extended its support to senior centres, homeless shelters, and other organisations. Credited with initiating the community garden

movement, the Green Guerillas played a pivotal role in popularising the idea of guerrilla gardening garnering international attention.

These pioneers shared common features in their missions, rooted in their ethos, aesthetic sensibilities, and a commitment to social justice and democracy. Additionally, kindness, solidarity, bravery, and, to some extent, altruism was integral to their endeavours, which were driven by a desire to contribute positively to both their own lives and the lives of others. Despite these shared values, differences among them also emerge. Winstanley and Christy chose to involve others and form robust social constellations that could advocate for their shared values. In contrast, Chapman worked alone in his mission. While Christy, Chapman, and Crombie prioritized environmental concerns, Winstanley was motivated by a vision of equality among people and a desire to influence power relations.

Contemporary studies present a nuanced perspective on guerrilla gardening revealing both positive and negative effects. The positive aspects include beautifying neglected spaces, potentially reclaiming urban areas as lived projects, and fostering community cohesion (Crane, Viswanathan, and Whitelaw 2013; Harman et al. 2018). Conversely, negative aspects often revolve around local residents' opinions regarding guerrilla gardeners' use of land without permission or without involving the local community (Adams, Hardman, and Larkham 2015). It is worth noting that the present study diverges from the cited articles as it adopts an autoethnographic approach, and the focal point of the actions is situated in a clearcut. The subsequent exploration will delve into various features unique to this specific location and to the notion of being-in-the forest (Häggström 2019a; 2019b).

Clearcuttings, Agroforestry, and Reforestation

Trees play a fundamental role in land regeneration, significantly contributing to soil improvement. They are crucial components of almost all planetary ecosystems by providing resilient climate regulation. Trees offer various environmental services, such as enhancing water quality and quantity, reducing soil erosion, and creating microclimatic conditions that sustain or improve productivity (Wojtkowski 2019). In the forest area under study, the municipality which owns the land employed a clean felling method resulting in the complete removal of all trees, including stems and canopy. This transformation has drastically altered the forest floor, which was once covered with moss, grass, and understorey. Now, it remains dry and covered with bark, dry branches, roots, and soil. Mosses, fungi, and undergrowth, essential for nutrient recycling (Kooijman, Kalbitz, and Smit 2018), have been disturbed. This ecosystem disruption negatively impacts organic matter dynamics and the water cycle, increases solar radiation, affects temperature, and reduces soil moisture. Studies indicate that clearcuts can disturb mercury

storage in soils (McCarter et al. 2022), and they are associated with biodiversity loss (Blumroeder et al. 2019). The complete removal of trees damages the physical habitats of numerous species.

As a response to mitigate the adverse effects of clearcuttings, there is increasing acknowledgment of the use of agroforestry. Agroforestry, rooted in the interaction of agriculture and trees, draws inspiration from traditional Indigenous practices honed over generations of close connection with ecosystems (Wojtkowski 2019). The concept encompasses integrating trees into farms and agricultural landscapes as well as engaging in farming within forests. While agroforestry has gained traction for its multifaceted benefits, including improved ecological conditions and sustainable land use, it is noteworthy that we have not encountered instances of agroforestry practices in clearcuttings.

An alternative method for designing a form of agroforestry is to employ a "temperate permaculture," a concept developed by Bill Mollison and David Holmgren in 1974. It is defined as "the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems" (Mollison and Holmgren 1978, ix). This approach emphasises the conscious use and maintenance of soil, water, and other life-sustaining resources for future generations. Moreover, it advocates for diversity over monoculture to promote ecological stability and resilience (Holmgren 2020). The work of Mollison and Holmgren has not only contributed to the development of temperate permaculture but has also led to the formulation of ethical principles encompassing ecological, economic, and social aspects for designing sustainable habitats.

The growing interest in permaculture philosophy, coupled with heightened concerns about sustainability, has sparked a renewed fascination with forest gardens, an ancient method of securing food in tropical areas. Coined by Robert Hart (1996) in the 1980s, the term "forest gardens" originated from his adaptation of principles derived from these traditional methods. Inspired by Toyohiko Kagawa, a Japanese activist and pacifist who, during the 1930s, advocated for extensive tree-planting on farmland as a solution to soil erosion caused by deforestation (Hart 1996; Kaminski 2007), Hart applied these ideas to temperate climates. Hart developed his own system tailored to temperate countries, particularly in Britain, where he established a small-scale garden based on a self-regulating system.

While not all landowners or governments are currently embracing agroforestry or forest gardens, there is a growing global demand for sustainable ecosystem enhancement leading to increased implementation of practices facilitating forest restoration (Crouzeilles et al. 2016). However, it is important to note that reforestation alone may not entirely compensate for the losses caused by deforestation. To address this, there is a crucial emphasis on restoring biodiversity, which involves the planting of diverse species and resilient plant material and fostering mutualistic relationships. The overarching goal is to establish ecosystems that are resilient, self-regulating,

and self-sustaining and guided by a holistic approach to living (Scout 2016). Scout argues that rewilding is an active process of restoring wildness to a given area, aiming for a return to a more natural state. Rewilding is often associated with thoughts rooted in green anarchism, which is an anti-capitalist and anti-authoritarian form of radical environmentalism advocating for biocentrism (Price 2019). In our project, this is not the case as it is anchored in philosophical and pedagogical ideas.

Underpinning Philosophical and Pedagogical Ideas

This study is inspired by eco-philosophical approaches, such as deep ecology (Naess 2005) and eco-phenomenology (Toadvine 2017). Eco-philosophy is not a uniform thought tradition but rather encompasses diverse thinking patterns. Eco-philosophical analysis covers areas such as human perspectives, nature perceptions, epistemology, foundations of action, and power. This approach advocates that the natural world is a complex network of relationships and coexistence among organisms within ecosystems. Human interference that disrupts this delicate balance poses a threat to all organisms. Deep ecology, as a specific eco-philosophical approach, contends that the living environment should be recognized as having inherent legal rights to exist and flourish independent of its instrumental benefits for human use (Naess 2005; Smith 2014).

Eco-phenomenology, which grapples with the human-nature relationship, recognizes that nature permeates all life including our own bodies. This perspective implies that humans, rather than being exceptional, are an integral part of nature. However, the simultaneous sense of separation from nature leads to destructive consequences, evident in the ecological crisis (Toadvine 2017). This dual experience of being human is elucidated by Merleau-Ponty (1995) through the concept of the materiality of the body, highlighting that the human subject perceives as a body that can itself be perceived. This embodied situatedness within a specific place, such as the clearcut in this study, results in a "perspectival" perception, limiting the ability to grasp the entire depth of the perceived (Prášek 2023). In our study, we relate to this concept as our capacity to transition into and out of different regions of our life-worlds essentially shifts regional focus. Phenomenologically, this implies that the fundamental shape of an experience is molded by its intentionality (Merleau-Ponty 1995). Therefore, our experiences of the clearcut are directed through the meanings we attribute to this environment. The way we shift our attention to the clearcut influences our perception, understanding, and expression of our experiences and reflections.

Häggström (2019a; 2019b) introduces the notion of "being-in-the-forest," describing it from a life-world phenomenological perspective as a physical presence encompassing spatial perception, bodily awareness, and notions of self. Drawing from Heidegger's (1988) concept of

temporality where past, present, and future coexist, in being-in-the-forest, experiences and events become entangled. Häggström suggests that this entanglement is evident when being with natural environments and other beings. In the context of this study, being-in-the-forest implies that we experience the former forest's existence while dwelling in the new situation, the clearcut. This involves integrating sensory information such as temperature, sound, and scent through our lived body, including our memory. Our comprehension of the clearcut is thus shaped by our "feelings and thoughts, of doing and acting" (Tuan 19779). Häggström (2019a; 2019b) emphasizes that being-in-the-forest is fundamentally being-with-trees. The question then arises: how do we experience being-in-the-forest in a part where the trees have been cut down?

This project, like many restoration initiatives, embraces a pragmatic pedagogical approach, emphasizing a "learning-by-doing" perspective (Pierce and Buchler 2011; Dewey 1929/2004). The foundation of this approach lies in the belief that knowledge is intricately linked to practice, and practical issues influence the questions people should ask and the answers they should seek. Pragmatism, partially derived from the empiricist tradition, posits that all knowledge arises from the senses or, in phenomenological terms, through experience. Language and thought are considered tools for prediction, problem-solving, and practical actions, underscoring the essential connection between thought and action.

According to Dewey (1916/2009), experience refers to the way living organisms interact with their environment. Experience is central to every learning process, and education is seen as the continuous reconstruction of experience. "Trying" and "undergoing" are pivotal in the process of experiencing and learning. As we act upon something, the consequences become a form of instruction, leading to reflective understanding. Dewey emphasizes that reflection is a process of inquiry and investigation and asserts that all thinking is research. Experience is culturally mediated, involving the active engagement of society members in common undertakings. This process, akin to getting to know the world or, in this case, a piece of a cut-down forest, aligns with Ralston's (2012) argument that participation in politically motivated gardening movements, such as guerrilla gardening, is a Deweyan interpretation of a "civic turn" to school gardening (57). This aligns with the idea of reclaiming unused urban land.

Consistent with Dewey's (1916/2009) philosophy, our project initiates with hands-on involvement, with action preceding reflection, and with theoretical considerations following, even though the structure of this article may suggest otherwise.

Experiential and Exploratory Method

This collaborative autoethnographic exploratory study delves into the direct experience of a phenomenon, aiming to "go to the things themselves" from a phenomenological perspective

(Husserl 1913/1962). This method involves reflective writing, writing from memory, and adopting a "first-person" perspective (Paulos 2021). Grounded in the study's pragmatic pedagogical approach, we leverage the Häggströms' two personal experiences to narrate practices and encounters, capturing individuals in the process of exploring what to do and how to live. This approach, as described by Adams, Jones and Ellis (2015), "balances intellectual and methodological rigor, emotion, and creativity," while striving for social justice and a better life (2). In this study, the exploratory actions are ways of familiarizing ourselves with and understanding a specific piece of land and its environment. Through our experiences, we aim to present this knowing and the process of becoming familiar with a new way of being-in-the-forest. This collective inquiry embodies a process of coming to know and becoming, emphasizing the core of practice in illustrating embodied forms of understanding.

This approach aligns with Art-Based Research (ABR) and Artistic Research (AR) as identified by Borgdorff (2018), which fall under what he terms as practice-infused research. The understandings sought in this study are deeply embedded in the Häggströms' exploratory actions, wherein the research is not only *about* practice but conducted *in* and *through* practice. Here, the self becomes a crucial tool in the research process, and through our reflections, individual lived experiences transform into shared experiences.

Autoethnography, as a method, combines the characteristic features of autobiography and ethnography. This implies that researchers retrospectively examine the study's actions, selectively choosing episodes and experiences. Autoethnographers engage in a process of analytically examining these experiences (Ellis, Adams, and Bochner 2011). There are diverse approaches to creating and presenting autoethnographic narratives; and in this study, results are presented through chronologically ordered action descriptions. These are followed by field note excerpts and reflections, incorporating introspective commentary on our observations and experiences. The subsequent interpretation allows for an examination of the subjective aspects of fieldwork actions and their significance to us.

The empirical data for this study is collected through a multifaceted approach, incorporating observations, field notes, memory notes from dialogues, photographs, video recordings, and sketches. The presentation of our results follows a chronological order, organized into distinct sections.

Ethical Concerns

In Sweden the *Right of Public Access*, known as *Allemansrätten*, grants everyone the freedom to explore and visit the natural environment (Naturvardsverket 2024). Protected by the law, this principle allows people to roam freely across the country, engaging in activities such as walking, jogging, hiking, cycling, riding, skiing, and camping on any land, except private gardens, those

near residential houses, or land under cultivation. The literal translation of *Allemansrätten* is "All man's right" (Naturvårdsverket 2024). This freedom extends to activities like picking berries, mushrooms, and flowers free of charge as long as they are not protected species. However, individuals are expected to pay their respects for nature and the animals residing there. The guiding principle is encapsulated in the phrase "Don't disturb – Don't destroy," as outlined by the Swedish Environmental Protection Agency (Naturvårdsverket 2024). As Swedes, we are cognizant of this principle and the accompanying responsibilities. In our project, we push the envelope slightly by incorporating planting and sowing activities. We exercise careful consideration regarding the species chosen, ensuring they are not locally rampant, invasive, or poisonous. The selection is made with an awareness of providing food for the local fauna, including roe deer, elk, birds, wild boar, as well as slugs and insects.

In conducting our research, we have adhered to common research ethics, encompassing the principles of: 1) reliability: ensuring the quality of the research through meticulous attention to design, methodology, analysis, and resource utilization; 2) honesty: implementing, developing, and examining research with transparency and reporting our study openly; 3) respect: demonstrating consideration for colleagues, society, ecosystems, cultural heritage, and the environment; and 4) accountability: taking responsibility for the research process from idea conception to publication (Vetenskapsrådet [Swedish Research Council] 2017).

The Context and Location of the Project

The beginning of this project traces back to the spring of 2020, coinciding with the Covid-19 lockdown and sparked by our reaction to the impact of the clearcut on our forest walks. As detailed in the introduction, the clearcut, previously a part of the surrounding spruce forest—a dominant forest type in the Northern Hemisphere, prompted a desire to transform these experiences and emotions into something positive. We envisioned the clearcut as an opportunity to contribute positively to the space.

The clearcut, formerly a segment of the boreal coniferous belt and the western taiga in Sweden, features podzols, which are characteristic of acidic soil solutions produced under needleleaf trees. The decomposition process is slow due to the low temperature and limited soil microorganismic activity. Podzols are generally acidic, nutrient-poor, and less hospitable to earthworms and bacteria, making them unsuitable for agriculture. The parent material in our study's location derives from granite gneiss. Moreover, the clearcut's slope position introduces considerations for soil erosion (Bakhshandeh et al. 2014). These unique conditions pose challenges that distinguish our project from other forest gardening and guerrilla gardening initiatives we have encountered.





Image: Left: The clearcut before the second clearcut. Right: After the second clearcut. Margaretha Häggström, 2020 (right), 2023 (left), photographs.

Preconceptions

As highlighted in the introduction, Mårten and Margaretha Häggström embarked on this project with distinct starting points yet were intrigued by each other's perspectives. The fusion of Margaretha's passion for forests and Mårten's interest in gardening led to the project's overarching goal of creating a forest garden. Acknowledging that the land was borrowed and understanding that this endeavour would not resemble conventional botanic gardens or forest gardens for children (Almers, Askerland, and Kjellstrom 2018), we embraced an adaptive approach. The project's planning unfolded organically rather than being predetermined, following a "go with the flow" philosophy.

Not anticipating the four-year duration, our approach lacked extensive preparation from one year to the next. Consequently, we did not delve deeply into the debate of gardening versus forest, and we did not explicitly categorize the project as a garden. In a phenomenological sense, our focus was on "the things themselves" (Merleau-Ponty, 1995), leading us to two distinct paths guided by our personal intentions. Mårten directed attention toward seeds, creating seed bombs, composts, and insect hotels, emphasizing diversity and ecosystem benefits. On the other hand, Margaretha's focus gravitated toward the interaction with the clearcut and taking tangible actions to restore ecosystem functioning.

From a pedagogical standpoint, both Mårten and Margaretha embraced a "learning-by-doing" process (Dewey 1929/2004), engaging in "acts of sensing, becoming, being, and belonging" (Kelly 2022, page?). This pedagogical orientation facilitated an immersive and experiential exploration of the project.

Result

Situated Learning Actions – Year One

Upon discovering the clearcut, we were moved to take action. Mårten initiated the project by crafting six insect hotels, recognising the critical ecological service provided by a diverse range of insects, particularly in pollination. We placed three of these hotels in pine trees at the top of the clearcut. Subsequently, we realized the importance of introducing plants and flowers to support bees and other insects, especially during the spring when bees emerge and require a nutrient source. Surveying the area, we concluded that establishing natural flowering beds was essential despite the challenges posed by the monoculture forest and the clearcut, which led to the depletion of soil organic matter and nutrients (Bowd et al. 2019). Without the forest canopy to mitigate solar radiation, the ground was prone to quicker heating and cooling. To address this, we decided to create a compost using various materials gathered from the surrounding environment, including soil, sand, leaves, woody stems, and vegetation. Recognising the need for a balance of carbon and nitrogen, we utilised the available resources. While the compost required several months to mature, we were eager to commence sowing immediately.





Image: One of the composts and its different layers of material. Margaretha Häggström, 2020, photographs.

We embarked on various initiatives to introduce a diverse array of plant life into the clearcut. One notable endeavour involved creating seed bombs comprising of meadow flowers, soil, and

clay, which we scattered across the area. To ensure adaptability to the local environment and promote compatibility with the indigenous fauna, we carefully selected old species that typically thrive in the region. In addition to seed bombs, we planted five or six small leafy trees, three small lilacs, and a butterfly bush (buddleia). Summer-flowering bulbs, including gladiolus, were added to assess their viability in this location. Sowing sunflower seeds, known for their ease of growth and attractiveness to birds, was another deliberate choice. The goal was to attract a variety of pollinators to the blooming flowers.

In an experimental and curious spirit, we decided to plant mangetout peas and potatoes to test their adaptability to the environment. Surprisingly, the mangetout peas began to germinate and produce shoots after just a few days. To ensure the plants received adequate water, we utilised a small stream located between the clearcut and the rest of the forest, which was particularly crucial given the absence of canopy coverage led to the stream drying out quickly. During our weekly visits to the clearcut, we faced unforeseen challenges and surprising developments. To address the ongoing water needs of the plants, we utilised a nearby pond as a water source. However, we encountered setbacks, such as the discovery that the young sunflower plants had fallen victim to forest slugs, resulting in their partial consumption.

On another occasion, we observed that approximately every three meters, new spruces had been planted. While this unexpected development wasn't part of our initial plan, we had no choice but to accept it. Additionally, we encountered an unexpected human element to our project when we discovered that people were picking the flowers we had sown, particularly the gladiolus. On one occasion, we encountered an individual carrying the flowers, proudly exclaiming, "Look what I found!" This unexpected human interaction left us momentarily speechless.





Image: Peas and gladiolus thrive. Margaretha Häggström, 2020, photographs.

Learning process and learning outcome: The seed bombing yielded limited success, with only one flower emerging. We speculated that the "bombs" might have been too dense or the ground too dry and nutrient-poor to support robust growth. On the other hand, the gladiolus appeared to thrive, attracting more human attention than anticipated. Some insects took refuge in the insect hotels, turning them into new nest sites.

As summer came to an end, we eagerly harvested the potatoes as we were uncertain whether the nutrient-poor ground would yield any. To our delight, we discovered a bountiful harvest of healthy potatoes. In early autumn, we initiated two composts by blending brown and green materials, including wood shavings, branches, hay, dried and fresh plant materials, leaves, grass, along with coffee grounds, eggshells, and fruit. These composts were intended to support our gardening endeavours in the upcoming spring, signalling our commitment to extending the project for another year. What began as an experiment had evolved into a full-fledged project. Throughout this journey, we learned humility in nature, found joy in simple pleasures away from television and the internet, and revelled in the marvel of seeds germinating and growing. Being in the clearcut spurred a sense of wonder and inspired proactive engagement with the environment. In addition, and in line with Häggström (2020), we learned how to live with and appreciate decay as it serves the ecosystem.



Image: The potato plants and the environment. Margaretha Häggström, 2020, photographs.

Actions of Inspiration and Joy – Years Two and Three

In the second spring, we approached our gardening project with enthusiasm, purchasing various types of potatoes and seeds for beetroots, carrots, and beans. Utilising our composts as planting beds, we experienced a heightened sense of purpose during these activities. With the nearby stream almost dried out, we turned to the adjacent pond for watering the seeds. Based on the lessons learned from the first year, we omitted the seed bombs and flowering bulbs, opting to sow meadow flowers near the pond to assess their growth in this environment.

Drawing on our previous experience, we expanded our exploration of planting activities, particularly focusing on peas and potatoes, which had proven successful in the nutrient-poor soil. The compost continued to receive a mix of brown and green materials. Despite the success of peas and potatoes, the latter fell prey to roe deer, while root vegetables struggled due to apparent attacks by forest slugs, causing seedlings to perish. Attempts to relocate and replant proved futile. Meadow flowers faced a similar fate. Disappointment ensued during the potato harvest as the yield was exceptionally small. Mårten encountered similar challenges on another nearby plot (with the landowner's permission), and the local farmer attributed the limited harvest to a "bad potato year." While he had better luck with other crops, the overall project faced difficulties—whether the meagre harvest was linked to nutrient loss, a broader phenomenon of a challenging potato year, or the impact of slugs.

In the third year, we observed the growth of spruce plants planted by the landowner. However, a devastating event unfolded when the municipality cut down trees on the other side of the small stream. This section of the forest (significantly larger than "our" clearcut) and all the trees around

the pond were removed. The impact of this development deeply affected us, draining our motivation to sustain the project. Consequently, we limited our efforts to planting potatoes. Despite the emotional setback, the harvest of potatoes in this year was notably better. We experimented with new planting locations, such as near a large tree stump, which provided wind shelter from the south and proved to be a successful choice.

Learning process and learning outcome: Succeeding in a planting project within a clearcut requires thorough preparation and planning. Given the nutrient-poor soil, the creation of composts a year before planting became essential. Additionally, as a clearcut lacks shade due to the absence of trees, careful consideration of crops and plants is crucial. Our observations indicated that plants growing at the edges of the clearcut near the remaining trees had a better chance of thriving compared to those in the middle. Surprisingly, potatoes seemed to grow successfully in various locations. Witnessing the slow recovery at the edges of the clearcut taught us about the remarkable resilience of the natural environment. Despite the disturbance to the ecosystem, different grass species began to grow, providing shelter for various microorganisms. While a clearcut visually represents a drastic change in the forest landscape and affects organisms dependent on tree functions, new life forms started to emerge and even thrive. Being in the clearcut evoked feelings of patience and hope.





Image: Differences between year one and four; the environment is growing green. Margaretha Häggström, 2020 (left), 2023 (right), photographs.

Actions of Habit and Play - Year Four

The decision to continue for another year was spontaneous and was driven by the observation that the soil in the planting beds appeared promising during the spring visit. Margaretha, without formal planning, took the initiative to prepare the beds, created a new compost, and decided to

plant flowers and potatoes once more. The planting beds were deemed too valuable not to utilise. The weather in early spring was notably rainy and was followed by sunny, warm, and dry conditions in May and June. Watering became necessary, and despite efforts, many flowers dried out. To safeguard the potatoes from potential predation before flowering, branches were arranged as "cages" around the shaw, serving the dual purpose of protection and shading. With the arrival of rain in July, additional flowers were planted, and meadow seeds were scattered again. The clearcut transformed into a recreational and play space, marked by Margaretha's artistic creations using branches. The place ceased to be a sombre clearcut and evolved into a meaningful, personalized space. This new mode of being-in-the-forest was constructed through activities rather than contemplations, fostering experiences that contributed to newfound knowledge and understanding.



Image: Various plants growing together. Margaretha Häggström, 2023, photograph.

Learning process and learning outcome: In the fourth year, notable signs of regeneration emerged in the clearcut. The spruce plants, initially planted by the municipality, exhibited growth, and raspberry bushes appeared in various locations. Small birch trees sprouted sporadically, and the forest floor saw increased coverage with vegetation. Although the previous efforts to sow meadow flowers seemed less successful, optimism arose as the ground appeared to be on the path to recovery. Some areas remained dry without greenery, underscoring the gradual nature of the forest's restoration. The evolving landscape conveyed a sense of hope, contributing positively to the ongoing learning process. It became evident that while the forest

would recover, the regenerated forest's character would inevitably differ from its previous state. The analogy of viewing cutdown trees as individuals (Häggström 2020) emphasized that new trees could not simply replace the lost ones, acknowledging the persistent sense of loss. The ongoing growth of new trees and the formation of a novel forest constellation remained a process to observe. Being-in-the-clearcut sparked feelings of kinship and a connection to the evolving landscape.







Image: We decided to protect the plants from animals while the plants were growing this year. Margaretha Häggström, 2023, photographs.

Discussion

The four-year project that emerged as a response to a clearcut in the forest illustrates a journey of transforming disappointment into proactive engagement. Our decision to move beyond frustration and to take action reveals a deep connection with the environment and a commitment to contribute positively to the disturbed landscape. However, as the results reveal, the clearcut did not require our intervention; instead, it was this piece of land that facilitated a transformation of our previous positive experiences of being-in-the-forest (Häggström 2019a) into a positive feeling of being-in-the-clearcut.

The results of the study demonstrate that it is possible to coexist with a clearcut, allowing for the growth of potatoes, peas, and some summer flowers. However, it appears challenging for other crops, such as vegetables and root vegetables, to cohabit this environment. The findings also indicate that creating planting beds using brown and green material from the forest is a feasible practice, but it takes three or four years for the soil to become more nutrient-rich. It is important to note that we have not quantitatively measured the nutritional value; rather, we observed that the composts became dark and soft. This transformation embodies a natural wholeness, and utilizing the new soil represents a process of interconnectivity that rendered our actions meaningful throughout this project.

Being-in-the-forest is an embodied experience of a shared world (Häggström 2019a). The results reveal our deep human-nature relationship. The actions during the project interconnect with the concept of bewildering (Crombie, 2014), which has made us more connected to the spirit of life. Our actions have transcended mere planting and greening of the clearcut; they represent our response to our relationship to this specific piece of the forest and our inherent sense of responsibility to the earth (Naess, 2005). This connection to our philosophical roots emphasizes that we, as humans, *are* nature. This perspective is in line with previous studies, highlighting both anthropocentric and eco-centric views on forest and forestry. These stress the importance of safeguarding the present forests, maintaining ecological balance, and preventing environmental degradation (Shastri 2013; Schoukens 2020).

The state of the forest is crucial for coexistence, encompassing human beings and other-than-humans, as well as for its own inherent benefits. Ecocentrism, being nature-centred and recognising humans as an integral part of nature while acknowledging the intrinsic values of other-than-humans, should serve as the foundation for every decision regarding forestry. This implies that both private and public landowners have obligations to the more-than-human-world (Crouzeilles et al. 2016). Such an approach aligns with Winstanley's (1648) assertation that there should not be any masters and extends this principle to include other-than humans. Schoukens (2020) advocates for a rights-based approach to nature, supporting this inclusive standpoint. Introducing the rights of nature into existing legal frameworks is a crucial step toward a holistic and a more ecocentric approach according to Schoukens. Allowing nature to be at the core of constitutional frameworks would be a means to rectify the prevalent dichotomy between humans and nature.

This project may be regarded as guerrilla gardening, but we consider it a playful interaction with an old friend who has been injured. Throughout our engagements with the clearcut, we have experienced a new sense of belonging spurred by the environmental transformations. Initially, we believed that the former intertwining we felt with the trees in this place could not be repaired after they were cut down. However, as we continued to interact with the site, we realized that the intertwining remains, and, in fact, we now care about this location even more than before. To truly bear the responsibility, experience the connection with the natural environment, and feel the sense of being a part of the whole, you need to be-in-the-forest, feel the soil, immerse yourself and embody the interrelations (Häggström 2019b). Through our project, we had the opportunity to do just that. We transformed the notion of being-in-the-forest into being-in-the-clearcut, leading to sensuous new comprehensions of what a forest relation is and can become. The absence of the trees became embodied within our emotions and place-based actions, reminding us that the clearcut was still part of the forest, and hence, part of us.

Clearcuts may alter people's sense of belonging and dissuade them from returning to the forest. However, as the results reveal, if individuals can engage with the clearcut and feel a connection through small actions aimed at restoring the environment, clearcuts might not solely evoke negative feelings. For instance, if people could participate in forestry processes, plant flowering plants, build insects hotels, and collaborate with the municipality, coexistence with the forest could persist and even strengthen. This suggestion has a clear pedagogical perspective. Nevertheless, forests are not solely here for human social values; foremost, they are bodies of being. Yet, they are not separate from us as human beings; they are intimately entangled with embodied subjects of both human and other-than-humans, as per Merleau-Ponty (1995).

This project can be viewed from a pragmatic pedagogical standpoint, involving "learning-by-doing" actions (Pierce and Buchler 2011; Dewey 1929/2004). These actions have been ways for us to acquire knowledge about the clearcut, understand what and how to grow plants there, and improve the soil quality. Engaging in these actions has provided a practical understanding of forest gardening even though we knew from the beginning that this would not be a forest garden for long—only during the forest's recovering phase. This active involvement facilitates embodied learning, which is distinct from more "passive" learning methods. We firmly believe that active, place-based learning, as reflected in our project, has the potential to deeply connect people in learning processes. Rewilding actions strengthen ethical relations, and working towards biodiversity recovery and enhancing ecosystem services through small restorative actions could foster a sense of being-in-the-forest, even in areas that have been cut down. As Scout (2016) suggests, these actions could be a way of returning wildness to the clearcut.

Works Cited

- Adams, David, Michael Hardman, and Peter Larkham. 2015. "Exploring Guerrilla Gardening: Gauging Public Views on the Grassroots Activity." *Local Environment* 20, no. 10: 1231-1246. https://doi.org/10.1080/13549839.2014.980227.
- Adams, Tony, Holman Jones, and Carolyne Ellis. 2015. *Autoethnography: Understanding Qualitative Research*. Oxford: Oxford University Press.
- Almers, Ellen, Per Askerlund, and Sofia Kjellstrom. 2018. "Why Forest Gardening for Children? Swedish Forest Garden Educators' Ideas, Purposes, and Experiences." *The Journal of Environmental Education* 49, no. 3: 242-259. https://doi.org/10.1080/00958964.2017.1373619.
- Aron, Paul. 2020. American Stories. Washington, D.C.: Lyons Press.
- Atleo, Clifford and Jonathan Boron. 2022. "Land is Life: Indigenous Relationships to Territory and Navigating Settler Colonial Property Regimes in Canada." Land 11, no. 609: 1-12. https://doi.org/10.3390/land11050609.
- Bakhshandeh, Shiva, Medhi Norouzi, Saber Heidari, and Shirin Bakhshandeh. 2014. "The Role of Parent Material on Soil Properties in Sloping Areas Under Tea Plantation in Lahijan, Iran." *Carpathian Journal of Earth and Environmental Sciences* 9, no. 3: 159 170. https://www.cjees.ro/viewTopic.php?topicId=455.
- Blumroeder, Jeanette, Natalya Burova, Susanne Winter, Agniezka Goroncy, Peter R. Hobson, Andrey Shegolev, Denis Dobrynin et al. 2019. "Ecological Effects of Clearcutting Practices in a Boreal Forest (Arkhangelsk Region, Russian Federation) Both with and without FSC Certification." *Ecological Indicators* 106: 1-16. https://doi.org/10.1016/j.ecolind.2019.105461.
- Borgdorff, Henk. 2018. "Foreword: Reasoning through Art." In *Artists in the University Positioning Artistic Research in Higher Education*, edited by Jenny Wilson, v-xi. Singapore: Springer.
- Bowd, Ellie J, Sam C. Banks, Craig L. Strong, and David B. Lindenmayer. 2019. "Long-term Impacts of Wildfire and Logging on Forest Soils." *Nature Geoscience* 12: 113-118. https://www.nature.com/articles/s41561-018-0294-2.

- Corns, Tomas N., Anne Hughes, and David Loewenstein. 2010. *The Complete Works of Gerrard Winstanley*. Oxford: Oxford University Press.
- Crane, Annie, Leela Viswanathan, and Graham S. Whitelaw. 2013. "Sustainability through intervention: A Case Study of Guerrilla Gardening in Kingston, Ontario." *Local Environment* 18, no.1: 71-90. http://dx.doi.org/10.1080/13549839.2012.716413.
- Crombie, Bob. 2014. "The Royal Reserves are Naturals for World Heritage." *Australian Wildlife* 1: 8-16.
- Crouzeilles, Renato, Michael Curran, Mariana S. Ferreira, David B. Lindenmayer, Carlos E. V. Grelle, and José M. Rey Benayas. 2016. "A Global Meta-analysis on the Ecological Drivers of Forest Restoration Success." *Nature Communications* 7 (May): 1-8. https://doi.org/10.1038/ncomms11666.
- Dewey, John. 1929/2004. *Reconstruction in Philosophy*. New York: Dover Publications. https://www.academia.edu/34920250/John_Dewey_Reconstruction_in_Philosophy_Dover Publications 2004.
- — . 1916/2009. *Democracy and education*. London: Merchant Books. https://www.jstor.org/stable/993995.
- Ellis, Carolyn, Tony E. Adams, and Arthur P. Bochner. 2011. "Auto-ethnography: An Overview." Historical Social Research /Historische Sozialforschung 36, no. 4: 273-290. https://www.jstor.org/stable/23032294.
- Hardman, Michael, Lovemore Chipungub, Hangwelani Magidimishab, Peter J. Larkhamc, Alister J. Scott, and Richard P. Armitagea. 2018. "Guerrilla gardening and green activism: Rethinking the informal urban growing movement." *Landscape and Urban Planning* 170: 6-14. https://doi.org/10.1016/j.landurbplan.2017.08.015.
- Hart, Robert. 1996. Forest gardening: Cultivating an Edible Landscape. Vermont: Chelsea Green Publishing. https://archive.org/search.php?query=external-identifier%3A%22urn%3Alcp%3Aforestgardeningc0000hart%3Alcpdf%3A22f1c2b0-24e8-484f-82e8-e680aa39841a%22.
- Heidegger, Martin. 1988. Being and Time. Oxford: Blackwell.
- Holmgren, David. 2020. *Essence of Permaculture*. Hepburn Springs: Melliodora Publishing. https://holmgren.com.au/essence-of-permaculture-free.
- Husserl, Edmund. 1913/1962. *Ideas: General Introduction to Pure Phenomenology*. New York: Collier Macmillan.

- https://ebookcentral.proquest.com/lib/gu/detail.action?docID=1702131&pq-origsite=primo.
- Häggström, Margaretha. 2020. "Reflections on Intertwinements with a Place in a Forest." In *Beyond Plant Blindness*, edited by Bryndis Snæbjörnsdóttir, Mark Wilson, and Dawn Sanders, 154-163. Berlin: The Green Box. https://www.thegreenbox.net/en/books/beyond-plant-blindness.
- —. 2019a. "Being in the Forest—A Matter of Cultural Connections with a Natural Environment." *Plants, People, Planet* 1, no. 3: 221-232. https://doi.org/10.1002/ppp3.10056.
- —. 2019b. "Lived Experiences of Being-in-the-Forest as Experiential Sharing with the More-than-Human World." *Environmental Education Research* 25, no. 39: 1334-1346. https://10.1080/13504622.2019.1633275.
- Kaminski, June. 2014. "Cultivating Nurturing Learning E-scapes: A Food Forest Analogy." Canadian Journal of Nursing Informatics 9, no. 3-4: 1-21. https://cjni.net/journal/?p=3823.
- Kelly, Vicki. 2022. "Resonance as an Act of Attunement Through Sensing, Being, and Belonging: Returning to the Teachings." In Relational and Critical Perspectives on Education for Sustainable Development: Belonging and Sensing in a Vanishing World, edited by Margaretha Häggström, and Catarina Schmidt, 3-18. Cham: Springer. https://doi.org/10.1007/978-3-030-84510-0.
- Kooijman, Annemieke, Karsten Kalbitz, and Annemieke Smit. 2018. "Alternative Strategies for Nutrient Cycling in Acidic and Calcareous Forests in the Luxembourg Cuesta Landscape." In *The Luxembourg Gutland Landscape*, edited by Annemieke Koojiman, Erik L. H. Cammeraat, and Harry Seijmonsbergen, 131-151. Cham: Springer. https://doi.org/10.1007/978-3-319-65543-7 7.
- Martin, C. Wayne, Robert S. Pierce, Gene E. Likens, and F. Herbert Bormann. 1986. "Clearcutting Affect Stream Chemistry in the White Mountains of New Hampshire." United States Department of Agriculture, Northeastern Forest Experiment Station, Research Paper NE579: 1-16. https://babel.hathitrust.org/cgi/ pt?id=umn.31951p010937975&seq=1.
- McCarter, Colin P. R, Susan L. Eggert, Stephen D. Sebestyen, Randall K. Kolka, and Carl P. J. Mitchell. 2022. "Effects of Clearcutting and Residual Biomass Harvesting on Hillslope Mercury Mobilization and Downgradient Mercury Accumulation." Journal of Geophysical Research: Biogeosciences 127: 1-21. https://doi.org/10.1029/2022JG006826.

- McKay, George. 2011. *Radical Gardening: Politics, Idealism and Rebellion in the Garden*. London: Frances, Lincoln. https://doi.org/10.3898/NEWF.75.REV05.2012.
- Means, Howard. 2012. *Johnny Appleseed: The Man, the Myth, the American Story*. New York: Simon & Schuster Paperbacks.
- Merleau-Ponty, Maurice. 1995. *Kroppens fenomenologi* [Phenomenology of perception]. Göteborg: Daidalos.
- Mollison, Bill, and David Holmgren. 1978. *Permaculture One. A Perennial Agriculture for Human Settlements*. Transworld Publishers.
- Naess, Arne. 2005. *The Selected Works of Arne Naess*. New York: Springer. https://doi.org/10.1007/978-1-4020-4519-6.
- Naturvårdsverket. 2024. The Right of Public Access. Last modified June 9, 2024. https://www.naturvardsverket.se/en/topics/the-right-of-public-access.
- Palamar, Colette 2010. "From the Ground Up: Why Urban Ecological Restoration Needs Environmental Justice." *Nature and Culture* 5, no 3: 277–298. https://doi.org/10.3167/nc.2010.050304.
- Paulos, Chistopher N. 2021. *Essentials of Autoethnography*. Washington: American Psychological Association. https://doi.org/10.1037/0000222-001.
- Pierce, Charles S. and Justus Buchler. 2011. *Philosophical Writings of Peirce*. New York: Dover Publications.
- Prášek, Petr. 2023. "Ecology, Eco-phenomenology, and the Immanent Ethics of Nature." Research in Hermeneutics, Phenomenology, and Practical Philosophy xv, no 2: 342-366. https://metajournal.org//articles_pdf/342-366-prasek-meta-tehno.pdf.
- Price, Andy. 2019. "Green Anarchism." In *The Palgrave Handbook of Anarchism*, edited by Matthew S. Adams and Carl Levy, 281-291. London: Palgrave Mamillan. https://doi.org/10.1007/978-3-319-75620-2.
- Ralston, Shane. 2012. "A Deweyan Defense of Guerrilla Gardening." *The Pluralist* 7, no. 3: 57-70. https://muse.jhu.edu/article/488375.
- Reynolds, Richard. 2008. *On Guerrilla Gardening: A Handbook for Gardening Without Permission*. London: Bloomsbury. https://doi.org/10.1525/gfc.2009.9.3.90.

- Schoukens, Hendrik. 2020. "Rights of Nature in the European Union: Contemplating the Operationalization of an Eco-Centric Concept in an Anthropocentric Environment?" In Non-Human Nature in World PoliticsL Theory and Practice, edited by Joana Castro Pereira and André Saramago, 205-234. Chad: Springer. http://hdl.handle.net/1854/LU-8665186.
- Shin, Tae S., John Ranellucci, and Cay J. Roseth. 2017. "Effects of Peer and Instructor Rationales on Online Students' Motivation and Achievement." *International Journal of Educational Research* 82, no. 1: 184-199. https://doi.org/10.1016/j.ijer.2017.02.001.
- Scout, Urban. 2016. *Rewild or Die*. Noida: Myth Media. https://theanarchistlibrary.org/library/urban-scout-rewild-or-die.
- Shastri, Satish C. 2013. "Environmental Ethics Anthropocentric to Eco-Centric Approach: A Paradigm Shift." *Journal of the Indian Law Institute* 55, no. 4: 522-530. https://www.jstor.org/stable/43953654.
- Smith, Mick. 2104. "Deep Ecology: What is Said and (to be) Done?" *The Trumpeter Journal of Ecosophy* 13, no. 2: 141-156. https://trumpeter.athabascau.ca/index.php/trumpet/article/view/1378/1660
- Toadvine, Ted. 2017. "Phenomenology and Environmental Ethics." In *The Oxford Handbook of Environmental Ethics*, edited by Stephen M. Gardiner and Allen Thompson, 174–185.

 Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199941339.013.16.
- Tuan, Yi-Fu. 1977. *Space and Place: The Perspective of Experience*. London: Edward Arnold. https://www.jstor.org/stable/2064418
- Vetenskapsrådet [Swedish Research Council]. 2017. *Good Research Practice*. https://www.vr.se/english/analysis/reports/our-reports/2017-08-31-good-research-practice.html.
- Winstanley, Gerrard. 1648. The New Law of Righteousnes Budding Forth, to Restore the Whole Creation from Bondage from the Curse. London: Giles Calvert https://www.diggers.org/diggers-ENGLISH-1649/NEW-LAW-OF-RIGHTEOUSNESS-1648-Winstanley.pdf.
- Wojtkowski, Paul. 2019. *Agroecology: Simplified and Explained*. Cham: Springer. https://doi.org/10.1007/978-3-319-93209-5.