

**Beyond Human Exceptionalism: Eco-Social Reorientations in Social Work
Through Nature-Based Practice**

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Abstract

Climate change, biodiversity loss, and ecological injustice form a serious interwoven social crisis, yet social work has been slow to engage with this complex issue meaningfully. Although the past 3 decades have seen an increase in eco-social work literature, most contributions remain theoretical. Responding to the lack of empirical studies in this area, this dissertation explores three central research questions: (a) How are Ontario social workers engaging in nature-based practices (NBPs) with clients? (b) What do they know and believe about nature and the environment in connection to their practice? (c) What are possible future directions for practice, education, and research?

This study is grounded in my dual ontological positions, drawing on realist and nominalist assumptions to recognize an empirical world that holds meaning and agency beyond human perception while also attending to the social construction of human knowledge and meaning-making. These foundations align with my theoretical framework, which brings together Critical Animal Studies, intersectional ecofeminism, and narrative inquiry. Methodologically, the study employed a sequential mixed methods design: Phase 1 involved a survey of 61 registered Ontario social workers, and Phase 2 consisted of narrative interviews with 15 participants.

My findings revealed that NBPs were being implemented across diverse practice settings, including walking, gardening, animal-assisted practices, the use of natural objects indoors, and weaving metaphors into therapeutic conversations. These practices were not described as fixed interventions, but rather as relational and adaptive processes co-created with clients. Social workers often framed NBPs as acts of care and resistance, unsettling professional hierarchies, reconfiguring therapeutic spaces, and creating subtle openings for ecological and multispecies

ethics. Collectively, the findings revealed a striking gap between what social workers are already doing and what social work education and regulation currently prepare them for.

This dissertation makes an original contribution to eco-social work by offering empirical insight into how NBPs are practiced, interpreted, and negotiated by social workers in Ontario. To respond meaningfully to the intersecting realities of climate change and ecological injustice, I conclude that social work must undergo a paradigm shift: reimagining care, ethics, and practice as grounded in interdependence across human and more-than-human worlds.

Keywords: Social work, nature-based practice, ecological justice, Critical Animal Studies, ecofeminism, anti-anthropocentrism, narrative inquiry

Dedication

To Rufus.

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Table of Contents

Abstract	ii
Dedication	iv
Acknowledgements	v
Table of Contents	vii
List of Tables	x
List of Figures	xi
Abbreviations	xii
Chapter 1: Introduction	1
Statement of Problem/Significance of Research	2
Purpose of Study and Research Questions	4
Key Concepts.....	5
Positionality and Self in Research	7
Summary of Key Findings.....	8
Organization of Chapters.....	9
Summary.....	9
Chapter 2: Literature Review	11
Historical Context for Nature in Social Work Practice	12
Emerging Key Ideas and Evolving Understanding	14
Environmental Social Work, Green Social Work, and Eco-Social Work.....	19
Dominant Paradigms in Environmental Social Work	24
Incorporating Nature in Social Work Practice	30
Gaps in Existing Studies on Nature and Social Work and Rationale for Study	36
Summary.....	37

Chapter 3: Theoretical Framework	39
Ontology	39
Epistemology	40
CAS	43
Intersectional Ecofeminism	48
Narrative Inquiry	51
Summary.....	53
Chapter 4: Research Methods and Design	54
Research Questions	54
Research Design: Mixed Methods.....	55
Data Collection: Two Phases.....	56
Data Security and Destruction.....	66
Quality of Research: Frameworks for Validity, Rigour, and Trustworthiness.....	67
Summary.....	71
Chapter 5: Findings.....	72
Phase 1: Survey Findings	73
Demographic Factors and Engagement in NBPs	76
Eco-Centric Beliefs Were Not a Strong Indicator of NBP Inclusion	78
Primary Reasons for NBPs: Emphasis on Human Well-being	82
Phase 1 Conclusions: Key Findings from Survey Results	89
Phase 2: Narrative Interviews.....	90
Narrative Findings: NBPs as Relational Praxis in Social Work.....	95
Conclusion.....	125
Chapter 6: Discussion	128

Beyond Standardized Models.....	128
Toward Trans-Species Social Justice	133
Resisting Institutional Control Through Place-Based Praxis	140
From Colonial Paradigms Toward Decolonial and Interdependent World Views.....	144
Conclusion.....	151
Chapter 7: Implications and Conclusion.....	153
Contributions to Knowledge.....	153
Implications	156
Limitations.....	158
Recommendations for Future Research.....	161
Conclusion.....	162
References.....	165
Appendix A: Research Ethics & Renewals	195
Appendix B: Permission to Use NEP Scale.....	197
Appendix C: Survey Questions.....	198
Appendix D: Recruitment Poster	208
Appendix E: Informed Consent Letter (Survey).....	209
Appendix F: Narrative Interview Topics	214
Appendix G: Email Communications with Interview Participants.....	215
Appendix H: Informed Consent Letter (Interview)	219
Appendix I: Descriptive Statistics from Survey	227
Appendix J: Additional Interview Participant Details	230

List of Tables

Table 1: Survey Descriptive Statistics for “if Yes,”	75
Table 2: New Ecological Paradigm Scale.....	79
Table 3: Survey Demographics & Descriptive Statistics.....	92

List of Figures

Figure 1: Artifact Shared by Alex.....	104
Figure 2: Artifact Shared by Ruth.....	112
Figure 3: Artifact Shared by Joseph.....	116

Abbreviations

CAS	Critical Animal Studies
CASW	Canadian Association of Social Workers
CASWE	Canadian Association for Social Work Education
CIHI	Canadian Institute for Health Information
IPCC	Intergovernmental Panel on Climate Change
NASW	National Association of Social Workers
NBP	nature-based practice
NEP Scale	New Ecological Paradigm Scale
OASW	Ontario Association of Social Workers
OCSWSSW	Ontario College of Social Workers and Social Service Workers
PIE	person-in-environment
RSW	registered social worker

Chapter 1: Introduction

Climate change is one of the most significant crises facing our planet. Yet, it is only within the past few decades that the relationship between human beings and nature has become an area of interest within the field of social work (Alston, 2015; Bailey et al., 2018; Ramsay & Boddy, 2017; Yeung et al., 2024). Historically, social work has been more concerned with social systems, mental health, and individual well-being. This anthropocentric world view continues to be the primary lens through which social workers understand social and environmental issues (Androff et al., 2017; Gray & Coates, 2012; Ramsay & Boddy, 2017; Thysell & Cuadra et al., 2023). The relatively recent rise of “environmental social work” (Alston, 2013; Divya, 2017; Gray & Coates, 2012, 2015; Heinsch, 2012; Krings et al., 2020; Nesmith & Smyth, 2015; Philip & Reisch, 2015; Willett, 2015) and “green social work” (Dominelli, 2013, 2015; Drolet et al., 2015; Gordon, 2017; Hillock, 2024; C. Noble, 2016) have provided new frontiers for social workers who seek to address environmental issues as part of the professions’ ethical commitment to social justice for humans (Canadian Association of Social Workers [CASW], 2024). Less widely referenced has been “eco-social work” (Bailey et al., 2018; Besthorn, 2014; Boetto, 2017, 2019; Matutini et al., 2023), which rejects anthropocentrism and instead understands humanity as an interconnected part of nature (Besthorn & Canda, 2002). Aligned with these values has been the call for a foundational paradigmatic shift in the profession away from anthropocentrism (Besthorn, 2012; Faver, 2013; Smith-Carrier & MacArthur, 2023). Despite these developments, critical perspectives remain underdeveloped, and further empirical research is needed to examine how social workers negotiate the tensions between anthropocentrism and multispecies, justice-oriented practice in their everyday work.

Statement of Problem/Significance of Research

Beyond use in direct practice with clients, there is an urgent need for social workers to take on environmental and ecological justice agendas across a variety of settings. Climate change is a global reality that can no longer be ignored (Alston, 2015; Des Marais et al., 2016; Kemp, 2011; Yeung et al., 2024). Widely understood as resulting from human activities (Intergovernmental Panel on Climate Change [IPCC], 2022; Stocker, 2014), the adverse effects of a warming planet are increasingly experienced by people around the world through irreparable damage to ecosystems, biodiversity loss, and increased severity and incidents of weather-related disasters (Cock, 2011; Gray & Coates, 2012; McKinnon, 2008). These impacts extend across human and more-than-human communities, producing loss of livable habitats, pollution, food insecurity, and forced migration (Alston, 2015; Muchacha & Mushunje, 2019; Närhi & Matthies, 2018).

These effects are not experienced equally. Socioeconomic status, race, gender, and age all contribute to disproportionate vulnerabilities, and climate-related disasters often amplify pre-existing inequality and poverty (Alston, 2015). The concept of “environmental racism,” first articulated by Bullard (1994), underscored how toxic industries are disproportionately sited in racialized communities, exposing residents to environmental harm without consent (Dominelli, 2013; Philip & Reisch, 2015). These insights laid the foundation for environmental justice frameworks that foreground the experiences of those most affected by ecological degradation. Gendered and intersectional impacts, including those of environmental racism and patriarchy (Besthorn, 2012; Muchacha & Mushunje, 2019), further highlight why these issues demand attention from social workers. At the same time, institutional and professional efforts to “green” social work do not automatically lead to transformation. Environmental or wellness-based

initiatives can at times reproduce the very hierarchies they aim to challenge, functioning as aesthetic or managerial improvements that leave deeper structures of inequality intact. When ecological language is adopted without attention to power and history, it risks reaffirming the same colonial and neoliberal ideologies that underpin environmental harm. In this study, I hope to gain an understanding of such complexity by exploring how social workers' engagements with nature may both reflect and resist these structural conditions in practice.

Although there is growing interest in integrating ecological justice into social work education (Beltrán et al., 2016; Nesmith & Smyth, 2015; Yeung et al., 2024), most contributions remain theoretical, with an emphasis on developing reflexive skills (Androff et al., 2017; Boetto, 2019; Des Marais et al., 2016) or curricular innovation (Reu & Jarldorn, 2022). What remains missing is empirical insight into how ecological concerns are enacted in practice. As outlined in the literature review in Chapter 2, no studies to date have examined how Canadian social workers incorporate nature into their direct work with clients. This dissertation addresses that gap. By exploring if and how Ontario social workers engage with nature-based practices (NBPs), why they do so, and the meanings they attach to these practices (Bailey et al., 2018), this study provides original empirical evidence that grounds eco-social theory in the lived realities of practice.

In undertaking this inquiry, it was important to acknowledge that social work in Canada remains a predominantly White and female profession, with recent analyses indicating that roughly 89%–90% of practitioners identify as women and more than 80% as White (Ashcroft et al., 2022; J. J. Kim, 2025; Mirshahi & Baczowska, 2023). These demographics shape which experiences and epistemologies are most visible within professional discourse and reinforce the need to consider how race, gender, and species intersect in shaping practice. Attending to these

dynamics strengthens the field's capacity to advance eco-social frameworks that reflect the full complexity of lived experience and structural power.

Purpose of Study and Research Questions

Given the limited understanding of how and why social workers incorporate nature into their practice, with this study I aimed to contribute to eco-social work scholarship by bridging theory and practice. As outlined in the literature review, the existing body of eco-social work scholarship remains largely theoretical, offering critical insights but limited empirical grounding. This study addressed that gap by examining how social workers in Ontario were already engaging with what I call NBPs, the meanings they attached to these practices, and the tensions and possibilities that emerged through their work.

To meet this purpose, the study had three objectives: first, to understand how social workers in Ontario conceptualize and include nature in their practice with clients; second, to investigate the knowledge, beliefs, and meaning-making of Ontario social workers who engage in NBPs; and third, to critically analyze how these practices both reproduce and resist broader anthropocentric, neoliberal, and colonial paradigms.

To achieve the above aims, the research was guided by the following research questions: (a) How are Ontario social workers engaging in NBPs with clients? (b) What do they know and believe about nature and the environment in connection to their social work practice? (c) What are possible future directions for practice, education, and research? Drawing on a dual ontological stance, the study recognizes both the material agency of the more-than-human world and the social construction of knowledge. These foundations, further detailed in Chapter 3, shaped a theoretical framework that integrates Critical Animal Studies (CAS), intersectional ecofeminism, and narrative inquiry. This framework informed the choice of a sequential mixed

methods design, beginning with an online survey of registered social workers (RSWs) in Ontario who identified as engaging in NBPs, followed by narrative interviews with a diverse sample of social workers. As detailed in Chapter 4, Methodology, this design supported a layered analysis of both breadth via a survey and depth via interviews, allowing the study to capture not only the presence of NBPs in practice but also the complexities, contradictions, and transformative potential that social workers articulated.

Key Concepts

Below, I outline my definitions of the three key concepts that guide this dissertation. My description of “social work,” “mental health,” and “nature” here is brief, mainly to assist readers; deeper engagement with these terms is provided in the literature review and subsequent chapters.

Social Work

The definition of social work in this study is grounded in my professional identity and experience as an RSW. With more than 23,000 members registered with the Ontario College of Social Workers and Social Service Workers (OCSWSSW, 2024), RSWs represent the largest regulated provider of psychotherapy in the province (Canadian Institute for Health Information [CIHI], 2023). The majority practice psychotherapy or provide one-to-one support with clients across diverse settings, including hospitals, community health, schools, and nonprofit organizations. Although other helping professions also integrate nature-based or therapeutic approaches, this project focuses specifically on RSWs in Ontario, both because of my own professional standpoint and because of the notable absence of social work perspectives in scholarship at the intersection of practice and the environment.

Mental Health

Given the scope of social work practice in Ontario, mental health and human well-being are central concerns. Typically, the primary mandate of front-line social workers is to address or contribute to the mental well-being of clients. In this study, I took mental health seriously as an entry point into understanding practice, but I did so critically. Rather than treating “mental well-being” as a fixed or universal construct, I interrogated this concept through social worker accounts and analyzed how they were shaped by relational, ecological, and systemic conditions including material and embodied dimensions. This open and curious framing allowed for an exploration of how NBPs complicate, extend, or resist dominant understandings of mental health.

Nature

Although this dissertation engages more fully with conceptual debates in the literature review, it is essential to note here why the term “nature” is used instead of related concepts such as “environment” or “ecology.” In my experience, *nature* is a more accessible and flexible term, less constrained by disciplinary definitions and more open to diverse interpretations.

Environment often carries connotations of physical settings or the outdoors, which risks narrowing the scope of how social workers might conceptualize their relationships with the more-than-human world. *Ecology*, although analytically rich, has been taken up within social work to describe specific theoretical frameworks, and its use here could generate confusion by implying agreement with those particular perspectives. In this project, therefore, I treated “nature” as a term under negotiation, one that social workers mobilize in varied ways that reflect relational, cultural, and professional contexts. By situating “nature” in plural and contested ways

that social workers engage with it, the study aimed to enrich understandings of how nature is conceptualized, practiced, and made meaningful within social work.

Positionality and Self in Research

Recognizing that definitions of nature are shaped by social location and history, I now turn to my own positionality within this research. As a White, settler, cisgendered, heterosexual woman, I write from a position of privilege that inevitably shapes my understanding of social work and ecology. My cultural heritage includes Portuguese grandparents who immigrated to Canada in the 1950s and English great-grandparents who settled in Saskatchewan in the early 1900s. I grew up and continue to live in Toronto on the shores of Lake Ontario, the traditional territory of many nations, including the Mississaugas of the Credit, the Anishinaabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples, and the current home to diverse First Nations, Inuit, and Métis peoples. My standpoint as a second-generation settler means my perspective is partial, situated, and deeply informed by the privileges of Whiteness, professional accreditation, and access to institutional resources. I acknowledge that my research takes place within ongoing structures of settler colonialism and neoliberalism that shape both social work and academia. Following feminist, anticolonial, and eco-social traditions, I aim to remain reflexively aware of how these social locations influence my interpretations and the authority I hold as a researcher.

At the same time, this work is rooted in my own lived entanglements with land, animals, and place. I grew up playing outdoors, camping, hiking, memorizing frog calls, restoring habitat, climbing trees, and navigating through seasonal cycles that shaped my understanding of myself in relation to the more-than-human world. These early encounters have grounded my enduring sense of wonder, but also my fear for the future of all species and the ecosystems upon which we

collectively depend. As a social worker, these personal orientations intersect with my professional commitments. I have worked across various areas, including mental health, gender-based violence, food justice, and community advocacy, where relational, ecological, and justice-oriented approaches have continually guided my practice. These experiences have taught me that care cannot be disentangled from its context, that healing is always relational, and that ethical obligations extend beyond the human realm. From this convergence of personal history, professional practice, and scholarly inquiry, I undertook this dissertation. My position was not one of neutrality, but of engagement: I approached this research with both hope and concern, seeking to contribute to a profession that is more responsive to ecological crises and more accountable to all species.

Summary of Key Findings

In brief, this study found that Ontario social workers were already incorporating NBPs across diverse settings, including walking sessions, gardening, and animal-assisted activities. These practices were not described as standardized interventions but as relational, adaptive, and co-created with clients in response to context and ethics. Quantitative findings showed that ecological beliefs, measured by the New Ecological Paradigm (NEP) scale, did not strongly predict engagement in NBPs, suggesting that ecological awareness often emerges through practice rather than preceding it. Narrative interviews deepened these insights, revealing how social workers navigate institutional and ethical tensions while reimagining care as interdependent across human and more-than-human relationships. Collectively, the findings highlight both the creative potential and the structural constraints of integrating ecological, decolonial, and justice-oriented approaches within social work.

Organization of Chapters

This dissertation is organized into seven chapters. Chapter 2 provides a literature review, situating this project within the historical and contemporary scholarship on the role of nature in social work. I trace the emergence of environmental, green, and eco-social work, highlighting both the contributions and the gaps that continue to shape the field. Chapter 3 introduces the theoretical framework, outlining my ontological and epistemological positions that guide the study. It explains how CAS, intersectional ecofeminism, and narrative inquiry are brought together to examine how social workers conceptualize and practice in relation to the more-than-human world. Chapter 4 details the methodology, including research questions, design, recruitment strategies, and approaches to data collection and analysis. Then, Chapter 5 presents the findings from the first phase of the study, a provincial survey of Ontario social workers, and builds on these with narrative findings from the second phase of the research, offering in-depth accounts of how social workers integrate nature into their work. In Chapter 6 I engage in discussion, interpreting the findings from both phases in relation to existing literature and the theoretical framework. This chapter highlights key tensions and openings in how social workers navigate anthropocentrism, multispecies ethics, institutional control, and decolonial commitments. Finally, Chapter 7 concludes by synthesizing the study's contributions and identifying implications for social work theory, education, practice, and policy, with attention to the future possibilities of eco-social and trans-species social justice.

Summary

This introductory chapter has outlined the rationale for the dissertation, situating it within the urgent context of climate change, ecological loss, and the profession's uneven engagement with these crises. I identified the problem and significance of the study, clarified its purpose, and

presented the guiding research questions. To orient the reader, I defined three key concepts: social work, mental health, and nature. I then reflected on my own positionality as a social work scholar-practitioner, whose commitments and lived experiences shape the lens through which I approach this work. I also provided an overview of the dissertation's organization. All these elements establish the foundation for an inquiry that bridges theory and practice, with the goal of advancing eco-social work as a field attentive to relational, trans-species, and decolonial commitments. The next chapter expands on this rationale through a critical review of the literature, demonstrating the knowledge gaps this project sought to address and the theoretical resources it built upon.

Chapter 2: Literature Review

This chapter presents existing literature to understand how social work has come to include nature in practice and reviews key concepts in nature and social work. To identify what has been written about the intersection of social work and nature, I searched several databases for peer-reviewed journals and relevant books, including SAGE Journals Online, Proquest, PSYCHinfo, and Taylor Francis. Individual journals were also searched for keywords, including *Canadian Social Work Review* and *Critical Social Work*. Initial searches for the combined terms "social work" and "nature" resulted in over 13,000 results due to multiple meanings of the terms, such as human nature. Including additional terms (and truncations) such as "environment," "ecological," and "sustainability" helped locate relevant articles. Articles and publications that were peer-reviewed used critical theory, were published in the last 25 years, and were Canadian were prioritized. Articles from earlier decades (the 1980s and 1990s) were also selected to provide insight into changes in conceptualization and understanding of this topic area. Additional resources were identified through the review process as key knowledge keepers and seminal texts were identified through frequent referencing, including in the area of eco-social work (for example, work by M. Gray, J. Coates, and F. H. Besthorn) and green social work (L. Dominelli). Relevant grey literature was also looked at. A total of 120 sources on the intersection of social work and "nature" were initially selected and reviewed. Source material was also analyzed for critical theoretical perspectives and research methodologies to identify significant gaps in knowledge that led to this study.

This literature chapter begins by reviewing some historical contexts for including nature and the environment in social work. Then, I look closely at several key concepts and how they are understood within the literature, including nature and mental health. The chapter examines

various philosophical perspectives on nature and social work within the literature, exploring how these perspectives differ and relate to one another. I describe the dominant paradigms and alternative perspectives within environmental social work scholarship. Then, I review literature regarding how nature has been incorporated into social work practice directly and how it connects to social work education. Last, the literature review discusses methodological approaches used to explore this topic and identifies some of the gaps. The chapter concludes by summarizing existing gaps in knowledge on nature and social work, providing the rationale for this dissertation study.

Historical Context for Nature in Social Work Practice

Indigenous communities around the world have understood the importance of nature in human well-being and healing since time immemorial. The inclusion of nature as a physical environment in social work, however, has been credited to Euro-Western social work's early beginnings, including Jane Adams (McKinnon & Alston, 2016; Närhi & Matthies, 2018; Peeters, 2012), who advocated for environmental reform and environmental justice because of public health concerns around drinking water and waste management (Nesmith & Smyth, 2015); and Mary Richmond who recognized that physical environments impact overall human well-being (McKinnon & Alston, 2016; Miller et al., 2012). This awareness of broader environmental contexts in social work continued to grow beyond the early 1900s, and social workers embraced person-in-environment (PIE) theory, which recognized humans and human well-being as part of larger systems and settings. Emerging in response to the rising popularity of psychodynamic theory, PIE is generally understood as referring to the social environment rather than the physical (Saari, 1992; Weick, 1981). PIE continues to be a core value of social work practice in North America and has been heavily critiqued for centring individuals and failing to attend to more

significant community and social justice issues concerning physical environments such as the natural world (Philip & Reisch, 2015). These early instances of acknowledging the physical environment were born out of concerns for humans, contributing to foundational social work theories and perspectives on human-nature relationships rooted in anthropocentrism.

These anthropocentric philosophical foundations of social work continued to grow, and nature-based terms to describe primarily human or social concepts continued as new theories proliferated in the 1970s through the 1990s (Närhi & Matthies, 2018), including human ecological theory (Bronfenbrenner, 1979), systems theory and life model (Germain & Gitterman, 1980; Meyer, 1983) and ecocritical approaches (Berger & Kelly, 1993; Hoff & McNutt, 1994). In addition to perpetuating human-centred values in social work, these examples of repurposing nature-based language have made conceptual clarity more challenging in pursuing meaningful integration of the natural world into practice (Zapf, 2010). It was not until the 1990s that social work started to intentionally consider the natural world in practice, and a new form of "eco-social work" emerged (Besthorn, 2012, 2014). Led by a few predominantly North American, environmentally concerned social work scholars, including Hoff (1998) and Gutheil (1992), articles on ecological crises in social work began emerging and have expanded in number each year since.

In the late 1990s and early 2000s, as Western society became concerned with the mental health implications of disconnection between humans and the natural world (Matthies et al., 2001), social workers increasingly recognized environmental considerations were missing from social work practice and began to form ecological social work perspectives (Besthorn, 2002; Coates, 2003) and eco-social approaches (Matthies et al., 2001). This shift in social work toward acknowledging nature and the environment more concretely was notable. Equally important was

recognizing that changes have been largely in response to worry about the impacts of biodiversity loss and conservation of nature on primarily human well-being. Thus, further exploration of philosophical values is warranted.

There has been a notable increase in literature on this topic in the last 2 decades. The advent of green social work (Dominelli, 2012) has provided new and essential perspectives on interconnected systems of oppression; however, this newer framework alone has not addressed the fundamental interlocking systems of domination that perpetuate violence against the living world, such as capitalism. Overall, social work's interest in nature has primarily paralleled the Euro-Western environmental protection efforts at a lagging pace, which has not been a particularly critical movement and has been centred on values of White supremacy. Notably, many stories of social work activism outside the dominant Western narratives—and within them—have been excluded from the scholarly literature (Divya, 2017). Examples include Indigenous land and water protection movements across Turtle Island and globally; the environmental justice movement led by communities of colour in the United States, including the 1991 First National People of Color Environmental Leadership Summit; food sovereignty and agroecology movements led by Global South and diasporic communities; and anti-speciesist scholarship and activism in CAS. I return to these in later sections. Diverse perspectives that look beyond human-centred approaches at the intersection of social work and the non-human world are lacking.

Emerging Key Ideas and Evolving Understanding

As described above, using nature-based terms for human theories in social work has made conceptual clarity around nature, ecology, and the environment challenging. Several terms have been used to describe integrated “nature-based” practice and theory in social work, with

some more clearly expressed than others. Findings from Ramsay and Boddy's (2017) conceptual analysis of the literature found that most social work researchers on this topic use "environmental social work" (Borrell et al., 2010; Coates & Gray, 2012; Hawkins, 2010; Heinsch, 2012; Krings et al., 2020; Miller & Hayward, 2014; Muldoon, 2006; Nesmith & Smyth, 2015; Philip & Reisch, 2015; Pulla, 2013; Teixeira & Krings, 2015; Weber, 2012; Willett, 2015); others use the term "green social work," (Dominelli, 2013, 2015; Hillock, 2024; C. Noble, 2016; Papadopoulos, 2019; Shaw, 2013), or "ecological" or "eco-social work," (Bailey et al., 2018; Besthorn, 2012, 2014; Boddy et al., 2018). A few recent studies have referenced climate change's impact(s) on social work practice in a way that indirectly references the natural world (e.g., Gordon, 2017). Building on the initial concepts of nature and mental health described in Chapter 1, this section examines how recent literature understands these concepts more closely.

Defining Nature

Very few existing social work literature authors explicitly define what they mean when using the word "nature" or environment. In fact, defining nature continues to be a struggle across and within academic disciplines (Vining et al., 2008). However, conceptual clarity is important in exploring the intersection of nature and social work. Heinsch (2012) offered a succinct but inclusive definition of nature, suggesting that it includes

the spectrum of habitats from wilderness areas to farms and gardens. Nature also refers to any single element of the natural environment (such as plants, animals, soil, water, or air), and includes domestic and companion animals as well as cultivated pot plants. (p. 46)

Although no established definition exists in the eco-social work literature, this detailed description provides a useful framework for this study.

Except for articles focused on animals or food justice, most conceptualizations of nature or the natural world in the social work literature exclude animals; in particular, issues around industrialized agriculture, mass farming, and animal welfare are largely missing. Meat consumption is a topic that historically has been avoided by environmentalists and thus has not been at the forefront of social work academia in this space (Gordon, 2017; McClintock, 2010). The general conceptualizations have mainly referred to land, sometimes water, and plants not used for human consumption/need (wilderness).

Beyond agreement on what ecology or nature means in the context of social work, significant theoretical questions have been avoided in the literature. One of environmental philosophy's most significant philosophical debates is whether humanity is separate from nature (D. F. White, 2003). Dominant ideologies (modern) suggest that not only are humans separate, but a hierarchy also exists that prioritizes humans above the non-human world (Hoff & Polack, 1993; D. F. White, 2003). These world views are not universal. Ramsay et al. (2023) urged recognition that the idea of separation between nature and humans is a conceptual understanding rooted in colonization. Indigenous knowledges globally and deep ecology perspectives view humans as embedded and interconnected with the living world and their responsibilities to it. These are significant questions that only some scholars outside of eco-social work have looked at, but they are critical considerations for this research project.

Mental Health and Well-Being

Exploring the relationship between nature and mental health is a significant gap in social work research (Besthorn & Canda, 2002). However, it has been an area of focus for other fields of mental health providers (Wolsko & Hoyt, 2012). Psychology has been identified as the helping profession with the longest history of explicitly considering the physical environment in

connection with human well-being, beginning in the 1970s (Besthorn, 2012; Doherty & Chen, 2016). Environmental social work borrowed significantly from the body of knowledge initially developed out of a belief that psychiatric clients required opportunities to take safe risks and be empowered, which led to outdoor therapeutic experiences (Surridge et al., 2004). Related works conceptualize some of the direct human benefits of nature relationships and experiences, but the focus is often on neoliberal conceptualizations of mental health, and through this lens is also a path away from liberation and well-being for all. In a recent review of the literature on climate change and emotional well-being, Lawrance et al. (2022) noted the difficulty in defining mental health and finding conceptual clarity or agreement across disciplines. They defined well-being within their article:

We take a broad view of mental health, that acknowledges that mental health and emotional well-being is a continuum for which any individual can have better or worse mental health at any time, and that good mental health comprises a state of well-being in which an individual can cope and flourish across all aspects of their life and relationships. (Lawrance et al., 2022, p. 444)

Building on this definition further, Lawrance et al. (2022) positioned humans as interacting or being interconnected with nature through personal and historical human experiences, including severe weather disasters, ongoing impacts of colonialism, and global conflict. Although this definition broadens understanding of well-being to include temporal and shifting global realities, Lawrance et al.'s (2022) conceptualization was still quite anthropocentric. Separating human well-being from the environment's well-being can reinforce an “othering” perspective of nature, becoming a tool to support human well-being.

Using nature only for the purposes of mental healing for clients neglects the inherent value or agency of the non-human world. “Humans disconnect from nature when they view nature predominantly as a commodity or resource for human consumption” (Norton, 2012, p. 301). This is also an example of some of the subtle ways in which the alienation of humans from the natural world continues to be reinforced unknowingly through systems like capitalism (Besthorn & Canda, 2002; Coates, 2003; Weick, 1981). Ultimately, there is a great deal of anthropocentrism rooted in eco-psychology and psychiatry (Besthorn & Canda, 2002; Norton, 2012); more research from a critical social work perspective is needed to challenge these beliefs.

Social work has drawn a significant amount of theory from other fields of study around the connection between nature and the well-being of humans, both physical and mental, from improvement in cognitive functioning to mood improvement (Kaplan & Kaplan, 1989; Norton, 2012). Evolutionary theories have also sought to explain the connection between humans and nature, offering, for example, the well-known biophilia hypothesis (Besthorn & Saleebey, 2003; Heinsch, 2012; Wilson, 1984). A common thread through this and other human-nature connection theories, according to Hartig et al. (2011), is the risk of centring beliefs in a biological connection between human well-being and nature. These conceptualizations of biological-only connection, disconnection and separateness should be approached cautiously, as they can reproduce binary, physical/biological ideals over spiritual and anthropocentric ideals. First Nations and Indigenous communities worldwide are more likely to acknowledge and value complex frameworks of interconnection and belonging, with nature as a source of emotional and spiritual strength (Brazier, 2014). This gap in Western beliefs highlights a need for eco-literacy, reconnection with place, and lessons from the land.

Environmental Social Work, Green Social Work, and Eco-Social Work

Some authors have asserted the interchangeability of green, environmental, and eco-social work practices, but there are, in fact, important distinctions between them (Besthorn, 2014). Green and environmental social work scholars excel at highlighting interlocking oppressive systems related to climate change and globalization concerns. However, the philosophical core remains the conservation of nature for the benefit of humans. On the other hand, eco-social work practices are more aligned with ecocentrism, deep ecology, and ecofeminism, suggesting interconnectedness and oneness with nature. Primary goals of eco-social work include a significant ontological and paradigmatic shift across and within the profession away from anthropocentrism. The following section examines the differences between these philosophical orientations within the literature.

Environmental and Ecological Justice

Social justice is a core value of social work practice and is frequently cited in the literature as a rationale for the social work profession to embrace and address environmental justice issues (Alston, 2013; Case, 2017; Coates & Gray, 2012). Willett (2015) identified environmental justice as having multiple meanings and purposes, being "a social activism movement, a policy discourse, and a conceptual frame" (p. 559). Environmental justice is vital to this work, as it recognizes that the human impacts of climate change and environmental violence do not impact humans equally. Environmental racism (Muldoon, 2006) is just one example of human injustice tied to this topic.

Although environmental justice can be a helpful tool or framework for addressing the inequity in human impacts of natural disasters, micro disasters, or climate change, authors like Besthorn (2012) argued that social work must extend justice values to also consider the non-

human world and ecological justice. Miller et al. (2012) put forward an important critique of environmental justice that suggested it contributes to ecological injustice via humanist philosophy. "Injustice arises from imbalances in the relationship between humans and nature, especially from giving priority to human needs, thus subordinating the interests of other elements of the natural world" (Miller et al., 2012, p. 271). Perhaps both environmental and ecological justice are required in social work practice and theory to dismantle and eradicate all forms of oppression.

Within social work, ethical codes and accreditation standards increasingly reference the natural environment, though in divergent ways. The International Federation of Social Workers revised its code in 2014 to address the physical environment more directly, followed by the Australian Association of Social Workers (2021; Heinsch, 2012) and the United States through the National Association of Social Workers (NASW, 2021; see also Case, 2017). Canada has lagged behind, only recently updating the CASW (2024) *Code of Ethics*. Although the revision explicitly named animals, it did so within an anthropocentric frame, positioning non-human beings as resources to be protected for human benefit. Scholars such as Ramsay et al. (2023) argued that social work practice was incomplete without treating the natural environment as both "client and colleague" (p. 1356), yet this formulation still risks reinforcing hierarchical relationships that sustain anthropocentrism. By contrast, Canadian Association for Social Work Education's (CASWE's, 2021) accreditation standards adopted species-inclusive wording in their vision and curriculum, calling for environments in which "all life forms and ecosystems can survive and thrive" (p. 16). This approach opens conceptual space to move beyond speciesism, but the standards nevertheless centre human social structures as the mechanisms of change. Together, these developments reveal both progress and contradiction: social work is beginning to

grapple with ecological and multispecies justice both internationally and nationally, yet persistent anthropocentrism limits the scope of these shifts and highlights a disjuncture between ethics and education.

Green Social Work

Green social work builds on environmental justice philosophies and has gained popularity in recent years as its own perspective. Green social work is defined as a form of holistic professional social work practice that focuses on the: interdependencies amongst people; the social organization of relationships between people and the flora and fauna in their physical habitats; and the interactions between socio-economic and physical environmental crises and interpersonal behaviours that undermine the well-being of human beings and planet Earth. (Dominelli, 2012, p. 25)

This perspective is rooted in anti-oppressive practice principles and environmental justice frameworks. Much of the practice research in this area is global, focusing on disaster relief, migration, and equitable distribution of resources (Dominelli et al., 2018). One of the goals often mentioned in green social work is to achieve sustainability. Teixeira and Krings (2015) defined sustainability as "using natural resources necessary for human survival responsibly so that they will remain available for future generations" (p. 515). However, this and most definitions of sustainability have also been critiqued for needing more fundamental shifts to make meaningful changes in nature-human relationships. Sustainability is too often used in parallel with the goal of maintaining capitalist economies (Drolet et al., 2015). Another critique of sustainability related to development in a globalized world is that it presupposes the right to develop anything and does not address or concern itself with environmental impacts beyond the human experience.

Eco-Social Work

Eco-social work perspectives are highly critical of Euro-Western modernist values that have led to overconsumption and damage to the non-human world. Eco-social work is also keenly interested in alternative ways of knowing, including spiritual and nonlinear understandings of the non-human world that challenge hegemonic views (Besthorn, 2014). Rooted in Arne Naess's philosophy of deep ecology, which recognizes an interconnected whole of all beings and creation, eco-social work fundamentally rejects an anthropocentric framework, seeking a path forward that recognizes humanity as a connected part of nature with a deep ethic and care for balance in the world (Besthorn & Canda, 2002). Primary goals of eco-social work include a significant ontological and paradigmatic shift across and within the profession away from anthropocentrism. Although the theoretical perspective of eco-social work aligns more with ecocentric beliefs, there is very little practice-based research in social work using this perspective (Matutini et al., 2023).

Social Work Theories (PIE)

Another important theme emerged as I reviewed nature and social work core theoretical orientations. As mentioned, PIE remains a key concept within Euro-Western social work even today, yet is critiqued time and time again by authors for being too narrow in its focus on the social environment, often ignoring the physical environment entirely (Alston, 2015; Besthorn & Canda, 2003; Coates & Gray, 2012; Gray & Coates, 2012; Närhi & Matthies, 2018; Norton, 2012; Pulla, 2013; Shaw, 2013; Teixeira & Krings, 2015; Weber, 2012; Zapf, 2010). “Social work as a discipline has useful models and language referencing the concept of PIE, but has avoided integrating these concepts to include more than human-centric, social consideration” (Des Marais et al., 2016, p. 102). This misuse of language and meaning serves only to reinforce

anthropocentric belief systems that separate humans from nature. This perspective also lacks the ability to “recognize the differences that exist among and within nations, based on cultural norms and political-economic realities” (Philip & Reisch, 2015, p. 472). Conceptual changes are needed within this theory to not only expand the meaning of the environment to include the physical or non-human world but also address its anthropocentric, modern, and individualist roots (Gray & Coates, 2012). How the profession begins moving toward this is unknown, but critically examining the existing studies suggests that a new and broader vision for social work is needed (Molyneux, 2010; Närhi & Matthies, 2018).

PIE has long situated people within environments, but it has rarely attended to how space itself organizes practice. Theories of environment have focused on social context rather than the physical and material conditions through which practice occurs. As a result, little attention has been paid to how the spatial arrangements of social work, including offices, interview rooms, and community sites, shape relationships of power, surveillance, and care (Bank & Nissen, 2017; Bryant & Williams, 2020). Recognizing that place is never neutral but produced through power and access is essential to understanding how institutional settings in particular shape practice. A small but growing body of research on social work with children, including studies by Ferguson (2010), Jeyasingham (2014), and Stanley et al. (2016), examined how institutional settings structure authority and interaction. Within this practice context, Stanley et al. (2016) showed that the design of social work offices could either reinforce professional hierarchy or support more reciprocal relationships, illustrating that the built environment actively participates in the production of practice. These insights highlighted an important gap: Although eco-social work has expanded understanding of environmental justice and ecological interdependence, little empirical attention has been given to the spatial realities of practice. How social workers inhabit

and reconfigure space, particularly in outdoor, shared, or public environments, remains underexplored. Attending to these overlooked dimensions provides a necessary foundation for understanding how nature-based and place-based practices might transform not only where social work happens but also the ethical and relational possibilities that emerge within it.

Dominant Paradigms in Environmental Social Work

Examining the dominant paradigms in nature and social work is critical to exploring a new and broader vision for social work. I begin with environmental social work because it is the largest body of literature on social work and nature. Complex social issues, global capitalist economies, and climate change are generally recognized as interconnected with human well-being (Hawkins, 2010). Perhaps nobody has highlighted the philosophical conflict between social work's modern roots and ecological justice better than Gray and Coates:

The biggest and most important contribution of the environmental discourse for social work has been the critical exploration of social work's role in modern society and humanistic assumptions, beliefs and values that support this role. Such a critique opens the door to the profession seeing the limitations and boundaries of modernity (dualism, uncaring domination, ruthless exploitation, and reductionism) that have constrained social work thinking and action to the primary activities of helping people to fit in and adjust to the demands and expectations of modern life rather than to change them. (2015, pp. 504–505)

This quote highlights the central paradox of current social work practice and how it is essential to notice and problematize discourses of capitalism and neoliberalism. These dominant Euro-Western perspectives pervade current social work values (Ramsay & Boddy, 2017). Parallels can be seen in Canadian social work practices and systemic responses to environmental concerns that

centre on individual change through “green capitalist” solutions (Atilés-Osoria, 2014).

Therefore, social workers need to understand critically how issues such as global economics impact the well-being of humans and the planet. A great deal of knowledge has been gained through green social work research, which seeks to uncover how capitalist systems have impacted humans in the Global North and South differently and continue to affect society in complex and diversely oppressive ways (Perkins, 2019). Hawkins (2010) highlighted that “In the current climate of global capitalism, concern for human safety and environmental protection are consistently subjugated to economic growth and maintenance of inefficient patterns of production and consumption” (p. 76). Globalized capitalism goes beyond just material production and extends to impacts on tourism, especially where Indigenous cultures are commodified for profits from travel experiences (J. Matsuoka & Kelly, 1988). Alternatives, or at least opportunities that challenge capitalist systems, are desperately needed (C. Noble, 2016).

Euro-Western modernist ideals, including capitalism (Philip & Reisch, 2015), neoliberalism (Coates & Gray, 2012), globalization (Norton, 2012), and consumerism (Muldoon, 2006) do not promote or value the well-being of the environment or humans (Gray & Coates, 2015). The socioeconomic values that have come out of modernity include limitless consumerism and progress that can only end with the total use of the world’s resources (Besthorn, 2014). Connecting modernity to post-modernist theory, Muldoon (2006) highlighted the contradiction between consumption and production that ultimately results in the destruction of what is needed for survival. Some of the most robust critiques of Euro-Western social work’s anthropocentric perspective highlight the domination of modernist philosophies that underpin the profession. Namely, the goals of supporting individuals in increasing production or contributing to neoliberal ideas of success may always be in opposition to ecocentric sustainability or

relationships to the non-human world (Boetto, 2019; Ferreira, 2010; Gray & Coates, 2015; Muldoon, 2006). An additional concern with the dualistic world view of modernity is that its' binaries are limiting, hierarchal, and prioritize unending growth while subjugating environmental ethics of care and even human rights (Philip & Reisch, 2015). By reviewing the dominant paradigm, I saw clearly that alternative philosophies that challenge anthropocentrism are essential for social work to resist perpetuating capitalism and other problematic dominant systems in a globalized world (Pulla, 2013).

Global Indigeneity and De-Centring Whiteness

Denzin et al. (2008) highlighted nature as one of the sites of crisis and tension in the context of Indigenous issues and decolonization, as well as the importance of spiritual connections that humans have to the land and nature. Such holistic perspectives are increasingly relevant to nature and mental health or well-being paradigms. However, references to Indigenous perspectives in the existing literature on nature and social work were minimal or absent.

As well as developing an understanding of the importance of settler colonialism in a Canadian context for this study (Hiller & Carlson, 2018) I considered diverse Indigenous perspectives across the globe, as they hold a multitude of alternative ontologies that guide human connection to the non-human world. For many Indigenous peoples, knowledge, history, and identities are embedded in the land and places (Zapf, 2010). Through storytelling and complex social systems, a tree, a rock, or a bend in a river can be part of life lessons that echo across the lifespan and even generations (Basso, 1996). This approach connects to Indigenous and other ways of knowing and the importance of language. Zapf (2010) highlighted that “‘The noun-based’ English language itself could limit our efforts to express connections with the natural environment. Indigenous languages tend to be verb-based, expressing an active and continuing

act of co-creation with the Earth” (p. 39). In many Indigenous languages, aspects of nature are described as active living beings with agency. Their spirit and living values are made clear through everyday language in a way English cannot accomplish (Basso, 1996). Indigenous cultures around the world have also always had holistic beliefs in human well-being. Social work needs to look beyond Euro-Western frameworks for ways of understanding well-being, ecology and interconnectedness, including Buddhism (Hanh, 2024) and Taoism (Besthorn & McMillen, 2002; Ramsay & Boddy, 2017), as well as diverse and emerging cultural practices like Shinrin-Yoku (forest bathing; Park et al., 2008).

Nesmith and Smyth (2015) identified multiple interpretations of environmental justice, which were distinct from but related to ecological justice, and noted two major themes across conceptualizations: “(1) the burden of environmental hazards or degradation is shared equally across all demographic groups or communities, and (2) there is equal inclusion in decision-making processes that result in environmentally related policies and actions” (p. 485). With this in mind, addressing social and ecological justice in the context of globalization requires a closer look at who is setting agendas for change and how power redistributes itself in an increasingly developed world. As international recognition of the importance of protecting what is left of diminishing resources, mandates have been set and promoted by Euro-Western frameworks that often ignore global settler-colonial realities. Policies created by “developed” nations are directive toward “developing nations” with expectations of compliance. The International Federation of Social Workers is among many international groups that have identified environmental justice as critical (McKinnon, 2008). However, the language used can also be viewed as problematic, highlighting the importance of “sharing” in a sustainable way without acknowledging that for

centuries, colonizing nations have stolen and abused the environment through the extraction of natural resources. Social work needs to and must do better.

In challenging the hegemony and violence of Whiteness, acknowledgement that the roots of environmental justice are complex and tied to power, racism, poverty, mobility, and access is necessary (Nesmith & Smyth, 2015). It is also important to highlight how history is being written in the present. Although adapted to Euro-Western frameworks, many mandates and agendas did not originate there. A foundational moment in the environmental justice movement was the First National People of Color Environmental Leadership Summit (1991). Prior to this event, the scope of environmental issues was focused narrowly on biological environmental issues. With the summit, the scope was expanded to include social implications of environmental degradation (First National People of Color Environmental Leadership Summit, 1991). The summit has since been recognized as a landmark moment for the movement and an example of a racially diverse environmental and economic justice grassroots approach that seems to be missing from discussions in social work literature on eco-justice (Reed, 2009).

Additional missing voices from the social work literature and knowledge production on ecological justice are those of Indigenous peoples. Colonialism's legacy is one of land exploitation and the removal of natural resources and wealth through the appropriation of environmental, cultural, and material resources (Atiles-Osoria, 2014). How, then, can environmental justice be understood, let alone achieved, without recognizing colonial histories? Although Indigenous people and colonized nations are also invested, seeking, or working toward environmental justice, their voices continue to be left out of discourses and international conversations and pushed to the margins (Atiles-Osoria, 2014).

Critiquing Anthropocentrism

Social work scholars around the world have critiqued social work and environmental social work in particular for being anthropocentric (Faver, 2013), calling for a long-overdue transition of the profession toward ecocentrism (Besthorn, 2012; Boetto, 2019; Hawkins, 2010). “From this perspective, the profession’s primary responsibility is to contribute to a transformation of human consciousness away from its embedded anthropocentric biases toward a new ecocentric orientation” (Besthorn, 2014, p. 203). Environmental justice has been identified as holding anthropocentric views on environmental protections for human needs. Authors such as Besthorn (2012) and Närhi and Matthies (2018) suggested radical ecological justice or ecojustice as conceptually more supportive of nature-humans interconnectedness. Rethinking human relationships with the natural environment and non-human inhabitants is required to find lasting solutions to many moral, social, and environmental issues (Irvine, 2007).

The criticism of social work as being anthropocentric has also been voiced in the interdisciplinary field of CAS (A. Matsuoka & Sorenson, 2013). Scholarship in CAS has contributed valuable insights into how violence toward animals and speciesism is connected to all forms of oppression (A. Matsuoka & Sorenson, 2018). CAS incorporates Richard Ryder’s concept of “speciesism” (coined in 1970; Ryder, 2000), which challenges beliefs that any being has the moral right to make value judgments on the lives of other living beings (A. Matsuoka & Sorenson, 2018). In seeking to eliminate discrimination and prejudice toward all animals, human and non-human, CAS acknowledges the complex constructs and belief systems (political, social, and cultural) that support or influence relationships between humans and animals. CAS also requires an understanding that the continued exploitation, subjugation, and violence toward animals by humans are interconnected with all forms of oppression and violence (A. Matsuoka &

Sorenson, 2014). These perspectives offer valuable insights for ecological justice and social workers to consider and incorporate into collective efforts for planetary well-being.

Incorporating Nature in Social Work Practice

To date, the research on social work and nature has looked at a range of aspects, including food security (Bailey et al., 2018; Gordon, 2017), environmental justice (Atilas-Osoria, 2014; Hawkins, 2010; Willett, 2015), disaster relief (Alston, 2013; Dominelli, 2015; Willett, 2019), animals (Faver, 2013; Gray & Coates, 2012; Irvine, 2007; Taylor et al., 2016) and international social work practice (Besthorn & Meyer, 2010; Dominelli & Ku, 2017). Primarily, studies have focused on social work at a macro level (Case, 2017; Des Marais et al., 2016; J. Matsuoka & Kelly, 1988; Muldoon, 2006) or looked at social work theory (Besthorn & Canda, 2002; Besthorn & McMillen, 2002; Boetto, 2019; Miller et al., 2012; Närhi & Matthies, 2018; Norton, 2012; Panagiotaros et al., 2022; Peeters, 2012; Saari, 1992; Shaw, 2013; Thysell & Cuadra, 2023; Wang & Altanbulag, 2022; Weick, 1981). Some publications have spoken to the need to include connection to nature in social work education (Androff et al., 2017; Bailey et al., 2018; Crawford et al., 2015; Divya, 2017; Drolet et al., 2015; Gray & Coates, 2015; Harris & Boddy, 2017; Jones, 2010; Miller & Hayward, 2014; Nesmith & Smyth, 2015; Papadopoulos, 2019; Reu & Jarldorn, 2022; Smith-Carrier & MacArthur, 2023; Teixeira & Krings, 2015), and several articles have looked at environmental social work as a general practice approach (Besthorn, 2002, 2012; Boetto, 2017; Coates & Gray, 2012; Gray & Coates, 2012; Heinsch, 2012; Hoff & Polack, 1993; C. Noble, 2016; Pulla, 2013; Ramsay & Boddy, 2017; Weber, 2012; Zapf, 2010). However, research on direct practice or therapy related to the environment has been minimal (Besthorn, 2014; Matutini et al., 2023; Ramsay et al., 2023). What has been argued across the existing literature is that eco-social work in practice contexts is not understood or been

addressed in a meaningful way through research (Bexell et al., 2019; Kemp, 2011; Krings et al., 2020; Molyneux, 2010; Thysell & Cuadra, 2023). The following section reviews nature within social work education, direct practice, and macro (policy) practice.

Social Work Education and Nature

There has been a growing focus on green social work education. Until recently (Hillock, 2024), most articles and books focused outside Canada. Authors such as Besthorn and Saleebey (2003) have contended that social work curricula should include content on the natural environment. Drolet et al. (2015) suggested dedicated courses to integrate teaching environmentalism in connection with social welfare, even providing an example of an undergraduate course outline. Food justice and food systems have been identified as easy entry points for social work educators to help students connect environmental justice issues from direct practice to more significant economic impacts and globalization through learning and practicums (Kaiser et al., 2015).

Although scholars have provided a range of ways and opportunities to include environmental justice in curricula and experiential placements for social work students, the shift has also been recognized as slow and challenging (Boddy et al., 2018). In an analysis of social work education across Australia, Harris and Boddy (2017) found little to no inclusion of nature or the environment in most social work curricula despite the repeated calls for change. This finding was supported by another study by Nesmith and Smyth (2015) that, in a limited sample study, found most social work students' educational experiences did not include the physical environment (Drolet et al., 2015). Recently, Reu and Jarldorn (2022) surveyed and interviewed a small sample of social work students in Australia, finding that participants were generally aware of and concerned about environmental injustice; however, bridging the gap between these beliefs

and their practice was a knowledge gap. Overall, there was an interest and desire for more learning in social work classrooms and a belief that eco-social work should be integrated across all learning subjects. Although some studies on social work education provided promising examples of applying transformational learning opportunities, no collection of evidence or feedback tracked changes in student knowledge or the impact of these curriculum changes on including environmental concerns (Boddy et al., 2018). More empirical and qualitative research with social workers in the field and social work students could identify barriers and opportunities to a much-needed shift in social work education.

Direct Practice

Des Marais et al. (2016) acknowledged the challenge of helping social workers incorporate environmental concerns when focusing on direct or clinical practice. Some examples of opportunities for inclusion of nature that have been highlighted in the literature include supporting survivors of natural disasters (Alston, 2013; Dominelli, 2015), environmental policy and advocacy (Alston, 2015), environmental justice (Dominelli, 2012), food security (Besthorn, 2013; Gordon, 2017; Kaiser et al., 2015), and supporting communities or populations facing pollution and ecological losses (McKinnon, 2008). Närhi and Matthies (2018) summarized key examples found in the literature, including “working in various disaster situations with families and communities, using nature's healing forces with young offenders, preserving of ‘green’ space and urban gardening, participating in animal-assisted work with the disabled and advocating the eco-social dimensions of environmental change” (p .499). Additional suggested NBP skills included biopsychosocial assessments, such as energy auditing (Borrell et al., 2010), animal-human relationships (Hanrahan, 2011), and the capacity to manage or respond to ecological disaster responses (Dominelli et al., 2018).

Recently, Panagiotaros et al. (2022) noted that a wide range of multidisciplinary theoretical perspectives is needed for social work to transition and adopt a greater focus on ecological justice. “It is now critical for social work to be versatile and apply existing skills to the climate crisis while, crucially, adopting new skills and practice methods” (Panagiotaros et al., 2022, p. 4782). They highlighted the need for new social work practices to grow beyond current approaches. In a recent participatory action research project in Australia, Boetto et al. (2020) interviewed social work practitioners ($N = 9$) who implemented the author’s proposed model for transformative eco-social work. The paper identified possible interventions at different system levels, except at the macro level. However, many interventions were still aligned with neoliberal environmental solutions, such as recycling programs. In direct practice, activities identified by three social work practitioners included outdoor sessions with staff and clients, as well as the use of metaphors and natural objects inside, in connection with mindfulness activities.

Although all the examples highlighted above provide concrete examples of approaches and ideas for how eco-social work might be practiced, the majority of the perspectives presented require the use of nature in the same problematic ways that Euro-Western values encourage: as a resource to be used for human benefit. These approaches may be helpful to individuals, but it is unclear how they might contribute to overall more eco-centric perspectives and the benefit of nature. The literature to date has generally avoided this level of critique; there is also limited evidence of these actions taking place and no knowledge of what impact they may or may not be having.

Policy and Macro Practice

The importance of the inclusion of nature in social work practice at policy and community levels has been a significant focus within the literature to date, from how policy

change might support rural women experiencing climate change (Boetto & McKinnon, 2013) to engaging social workers in policy-making that might better prevent environmental disasters that harm humans (Philip & Reisch, 2015), and understanding ecological challenges within vulnerable communities (Belchior Rocha, 2018). Green social work, in particular, has focused on the global and systemic impacts of climate change, exploring how social workers can address environmental issues through community mobilization, education, interprofessional and collaborative advocacy, and participation in policy (Dominelli, 2013). An example of macro-level research includes the Transition Town Initiatives (Bay, 2013), which used a community-led approach to target the reduction of carbon emissions as an alternative to bureaucratic policy approaches. Although valuable, macro policy and community approaches have been critiqued as being generally slow, inconsistent, and often not meaningful to all persons involved (Appleby et al., 2017). Studies at the other levels are needed to provide further context and a richer understanding of how clients, communities, and social workers understand these important systemic issues that impact the non-human world.

Methodology in Existing Studies

This section briefly highlights the methodologies used to explore nature in the social work literature. One of the key findings from reviewing existing studies is that a significant amount of the research has been theoretical (Besthorn, 2012, 2014; Boddy et al., 2018; Coates & Gray, 2012; Dominelli, 2013; Hawkins, 2010; Muldoon, 2006; Norton, 2012; Sackett, 2010; Zapf, 2010) or focused on conceptual analysis (Besthorn & Canda, 2002; Närhi & Matthies, 2018; Ramsay & Boddy, 2017). Only two empirical Canadian studies have been published so far (Case, 2017; Drolet et al., 2015). There have been a few general qualitative studies (Alston, 2013; Boetto & McKinnon, 2013; Case, 2017; Dominelli, 2015), several in the form of case

studies (Appleby et al., 2017; Bay, 2013; Kaiser et al., 2015; Philip & Reisch, 2015; Taylor et al., 2016; Willett, 2015), and some project or program evaluations (Borrell et al., 2010; Harris & Boddy, 2017; Papadopoulos, 2019). Recent publications also used participatory action research (Dominelli & Ku, 2017; Panagiotaros et al., 2022) and auto-ethnography (Bailey et al., 2018). However, none have used mixed methods. No survey studies or interviews with social workers have been conducted in Canada to date.

Of the few empirical studies, Faver (2013) conducted a small online survey using the NEP Scale with U.S. social work students near the Mexican border ($N = 105$). Higher anti-anthropocentrism scores were associated with animal welfare concerns, suggesting that interconnectedness may be a useful concept for educators seeking to cultivate ecological values. Shaw (2013) also used the NEP Scale to survey NASW members in California, finding that their environmental values were not significantly different from the general population, though the NEP remains the most frequently applied instrument for measuring ecological attitudes in social work. More recently, Yeung et al. (2022) surveyed 102 qualified social workers in Aotearoa New Zealand, examining attitudes toward environmental issues and sustainable development. Their findings indicated moderate pro-ecological perspectives, strong belief in climate change, and broad agreement (over 80%) that environmental issues should be part of social work practice. Participants highlighted the integration of Māori values and Indigenous perspectives as central to environmental justice. Although these studies offered insight into ecological attitudes, they remained limited in illuminating how social workers enacted or negotiated these commitments in practice. Combining standardized tools, such as the NEP, with qualitative approaches may provide a more meaningful understanding of how social workers make sense of and integrate ecological and justice-oriented beliefs into their professional practice.

Gaps in Existing Studies on Nature and Social Work and Rationale for Study

More than a decade ago, Molyneux (2010) conducted a detailed concept analysis of eco-social work literature, citing a lack of insight into how social workers engage in eco or environmental social work practice and what the realities of these practices might entail. Divya (2017) highlighted this finding: “Disappointingly, while the [social work] literature did centre on the transactional relationship between people and their environment, it did not explore the practical application of this relationship” (p. 66). The literature generated since then on this subject continues to be primarily conceptual (Crawford et al., 2015; Panagiotaros et al., 2022), with only a few empirical studies to date. In particular, practical applications that aim to transform a predominantly transactional (and often oppressive) relationship between people and nature are lacking (Molyneux, 2010), and limited examples exist, primarily in recommendations for social work education (Ramsay & Boddy, 2017). The majority of suggestions were broad in scope, focusing on theory. What is now needed is a deeper understanding of how to effectively implement these shifts in beliefs and all forms of direct practice (Divya, 2017) from a critical perspective.

Through a critical lens, social work can critique Euro-Western pathologies of mental and physical health to recognize and advocate against the more significant structural barriers contributing to overall negative well-being. Embracing NBPs in critical, reflexive, and holistic ways that seek to understand and support the development of eco-centric human-nature relationships may be a better path forward. Philip and Reisch (2015) offered some insight into how clinical social workers could engage in these ways of practice while addressing the tension between collective well-being and individual autonomy: “A possible solution lies in acknowledging that all people need and want a sense of place and belonging and that these

desires are best realized by integrating a respect for the natural environment into every aspect of their lives” (p. 480). To advance this integration of ecological consciousness in social work, researchers need to understand better how social workers engage in this work (practice applications) and what meaning they make through their nature-based relationships.

In Ontario, social work remains the largest regulated profession providing counselling and psychotherapy services (CIHI, 2023), and mental health is the largest field of social work practice (Ontario Association of Social Workers [OASW], 2018). Because social workers actively participate in programs such as mood walks (Canadian Mental Health Association, 2016) and forest therapy (Global Institute of Forest Therapy, 2019), the notable absence of understanding of why and how social workers are engaging in such nature-based approaches with clients also means there is a lack of critical perspectives on this practice. Unearthing this knowledge has the potential to conceptually challenge what well-being means to both humans and the non-human world. If well-being is an interconnected endeavour, and the call within social work codes of ethics “to work towards individual wellbeing and social change” (Boddy et al., 2018, p. 367) is recognized, then certainly the field needs to know more about eco-centred practices and ontologies to achieve well-being for all. To address this knowledge gap, this study aimed to conduct empirical and qualitative research on how social workers incorporate nature into their practice, understand the relationships between nature and mental health from a critical perspective, and contribute to meaningful future directions for the profession.

Summary

In this literature review chapter, I discussed how nature has come to be included in social work practice historically and identified significant concepts relevant to this study. For conceptual clarity, different perspectives on nature in social work were explored, including green

social work, environmental social work, and eco-social work. Last, the literature was reviewed to determine how nature has been included in social work education, practice, and policy. The methodological focus of studies to date was also reviewed to support the direction of future studies. Reviewing the literature and identifying current knowledge and gaps helped mark the path to making meaningful contributions to knowledge. This path included deciding on my theoretical approach. The next chapter outlines the theoretical framework I used to explore this topic.

Chapter 3: Theoretical Framework

This chapter outlines the theoretical framework that informs the current study, building on my ontological and epistemological perspectives to establish a foundation for understanding human–non-human relationships. The literature review revealed a persistent gap in scholarship: Although conceptual debates abound, little is known about how social workers engage with nature in practice, and even less about the meanings they attach to these engagements from critical perspectives. To address this, I drew on CAS, ecofeminism, and narrative inquiry, which collectively resist anthropocentric assumptions and challenge dominant positivist epistemologies. CAS emphasizes trans-species social justice, highlighting the interconnectedness of environmental and social justice, capitalism, and systems of oppression. Similarly, narrative inquiry provides a framework for exploring how humans construct meaning in relation to the non-human world, advocating for storytelling as a valid and critical way of knowing. By centring these perspectives, this study challenged the notion that knowledge is rooted in a singular truth while still honouring participants’ lived experiences. In doing so, it created space for the untold stories of the non-human world, fostering a more inclusive and justice-oriented approach to ecological concerns in social work.

Ontology

My ontology exists within and between realist and nominal assumptions about the world around me. In concentrating on animals, nature, and the environment, I recognize an external world that exists and holds value with and without the presence of humans. The de-centring of human world views informed my use of CAS and trans-species social justice in this project, which are described in more detail below. To not integrate realist assumptions within this project and presume that existence can only be understood through a human lens would be inherently

anthropocentric (Crist, 2004). As a social worker, I also believe that humans actively construct and interpret the world around them and that these world views are multiple and diverse. Context and subjective knowledge are important because they interact with and impact ontologies, so I have included narrative inquiry and intersectional ecofeminism in this project as part of my theoretical framework. The duality of realist and nominal perspectives has been described as critical realism (Bhaskar, 1975, 2009), which “seeks to unite the subjective constructivist interpretive approach and the objective positivist empirical approaches by suggesting a layered view of the world” (Ramsay et al., 2023. p. 1357). My perspective draws from this orientation to acknowledge both material realities and meaning-making processes, but I do not adopt critical realism as a full theoretical framework. Instead, it serves as an anchor for reconciling tension between meaning and materiality with my dual ontology, which is further expanded through CAS and ecofeminist perspectives. Some scholars suggest that these perspectives exist on a continuum (DeForge & Shaw, 2012); however I see a continuing tension between realism and nominalism, which I interrogated, resisted, and complicated through my analysis, as these are dominant philosophical foundations that perpetuate Western beliefs in a separateness and hierarchy of human experience over all other living beings.

Epistemology

My epistemological perspectives are informed by my belief in multiple ontologies, including human and non-human ways of being. To this end, I outline below how my epistemology includes seeking out ways to resist colonization, including recognition of non-human knowledge and beliefs. I also describe how I understand human construction of knowledge, including my own.

Decolonizing Knowledge

In describing my epistemological standpoint, it is first vital to recognize that research is implicated in the colonial project as a form of knowledge creation. Through engaging in research as a settler-researcher I must ask questions about why, where, and when knowledge is being created and for what purpose. Mignolo (2009) wrote, “We know that we have to decolonize being and to do so we have to start by decolonizing knowledge” (p. 171). Decolonizing knowledge requires ongoing reflexive dialogue, discussion, and acknowledging privileged positions of Western thought, recognizing how they simultaneously dominate and subjugate all living beings. In *Re-Conceptualizing Anishinaabe Mino-Bimaadiziwin (the Good Life) as Research Methodology: A Spirit-Centered Way in Anishinaabe Research*, Brent Debassige (2010) asked, “How can students [and others], steeped primarily in hegemonic Eurocentric consciousness, become aware of the nature of their cultural conditioning” (p. 16). I have been a student enrolled in Canadian educational institutions for over 25 years—more than half my life. It would be naive not to recognize how dominant settler values of knowledge for acquisition have influenced my ontological assumptions toward singular and human-centred world views. With awareness of these biases, I have prioritized resistance and opportunities to learn new ways of knowing throughout my research journey and this dissertation project. To do so, I actively engaged in conversation with myself through memo writing to continue interrogating these beliefs and world views within my methodology, analysis, and discussion chapters that follow.

Knowledge Beyond Humans

My ontological beliefs inform my epistemological stance that there is an empirical world that exists, holds, and produces its own knowledge(s), from the sentience of animals (Singer, 1975) to communication between plants and trees (Kimmerer, 2015), to the agency of land and

place (Larsen & Johnson, 2016), as well as ways of knowing beyond human comprehension. There is immense value in acknowledging that other beings have individual realities, and doing so is a de-centring exercise important to my theoretical framework that seeks a less anthropocentric approach to social work practice. To this end, I see merit in empirical research, but I also challenge the idea that empirical research must be driven by positivist epistemology (Turner, 2006). Recognizing knowledge beyond humans also supported the project's aim to acknowledge how colonization historically and presently devalues and destroys eco-centric epistemologies and societies. Indeed, colonization actively uses the separation and subjugation of specific humans and animals as a colonial tool (Ramsay et al., 2023).

Building on this orientation, I use the term *agency* throughout this dissertation to describe the relational capacities through which humans and the more-than-human world participate in shaping experience and meaning. This is not agency understood solely as individual intention or control, but as something emergent within relationship, interdependence, and affective exchange. Drawing on CAS, I recognize non-human animals as beings with agency, personhood, and subjectivity whose lives are intrinsically valuable and whose interactions with humans form part of a dynamic, symbiotic interrelationship that co-shapes history and social life (Best, 2007a; A. Matsuoka et al., 2020). This perspective resists anthropocentric assumptions that reify human agency as the sole autonomous force of history, emphasizing instead a co-evolutionary understanding in which meaning and action emerge through interdependence (Best, 2007a). My framing aims to resist binaries that confine agency to humans while remaining reflexive about the interpretive limits and possibilities of human narration. When I describe or interpret weather, land, or animals as “responding” or “participating,” such language gestures to the felt reciprocity of encounter rather than an anthropomorphic projection. In this sense, agency becomes a way of

naming the relational vitality through which meaning, care, and ethics are co-produced across species lines, aligning with this dissertation's broader commitment to eco-social perspectives.

Constructed Knowledge

Aligned with some of my nominal world views, I also believe humans construct and interpret the world around them. Through these meaning-making processes, we generate multiple truths and ways of knowing. Therefore, pursuing knowledge through research requires a complex understanding of human experiences as a confluence of cultural, social, and physical contexts. Because of this, I used narrative inquiry for this study with an understanding that the findings of my research were situated and temporal and that my understanding could only ever be partial. Analysis through multiple ontological beliefs allows for diverse and rich understandings of how knowledge is constructed and, importantly, what knowledge holds value. I discuss this further in Chapter 4, when describing the study's methodology. Embracing epistemic diversity through my theoretical framework below and the methodology outlined in Chapter 4 was also integral to creating space for alternative ways of knowing that align with eco-centric values of the natural world outside of human beliefs and experiences.

CAS

Aligned with my ontological and epistemological beliefs described above, this study engaged CAS, an interdisciplinary field that imperatively critiques social work's anthropocentric and speciesist foundations. Emerging out of modern animal liberation movements, CAS has distinguished its unique perspective by recognizing the oppression of all living beings as interlocking and an explicit activist pursuit of liberation for all species. Building on but moving beyond the moral philosophies of Singer's (1975) utilitarianism and Regan's (1983) deontological animal rights, CAS adopts a structural and intersectional critique that situates

species oppression within the systemic contexts of capitalism, patriarchy, and colonialism. Historically, understanding the oppression of all living beings as intertwined was where general animal rights movements fell short (Nibert, 2002). Nocella et al. (2014) attributed some of these gaps to the philosophical foundations of animal rights movements rooted in religious philosophies that reinforce anthropocentric values of domination. These belief systems have been indoctrinated into legal understandings of property and animal relationships that actively support oppression and reinforce systemic violence toward non-human animals (Francione, 1995). CAS, however, recognizes that the pursuit of animal rights is vital to social justice and that systems of hierarchies, oppression, domination, and exploitation implicate all living beings (Sorenson, 2010). Generating valuable insights into how violence toward animals is connected to all forms of oppression (A. Matsuoka & Sorenson, 2013, 2018), some of the key tenets of CAS that support the theoretical underpinnings of this study are described in further detail below, including anthropocentrism, speciesism, trans-species social justice, and intersectionality.

Anthropocentrism

A central concept CAS opposes is anthropocentrism, which refers to the creation and reinforcement of sharp ontological and ethical division between human and non-human lives. This system of beliefs posits human exceptionalism, which states that human beings possess morally significant qualities that are absent from other living organisms. Anthropocentrism not only elevates humans above other beings but also contributes to hierarchies within humanity, often subjugating certain groups, such as women and racialized people, as closer to non-human animals. Frequently overlooked, CAS recognizes that anthropocentrism underpins the enslavement, killing, displacement, and extinction of other species (Best, 2007a) and is entrenched within the animal industrial complex (Noske, 1989), a fundamental structure of

global capitalism. Although anthropocentrism views the natural world as a resource for human use and sees non-human animals as tools for human ends, CAS recognizes them as sentient beings with intrinsic value whose interests deserve acknowledgment (Best, 2007a; Regan, 1983). Utilitarian philosophers like Singer (1975) argued that the sentience of other beings imposed at least a moral obligation to reduce human-caused suffering. CAS goes further, asserting that sentience forms the foundation for recognizing the personhood of non-human beings and advocating for their treatment with respect, compassion, and justice.

Speciesism

CAS offers a crucial perspective on ecological justice. Significantly, Ryder's concept of "speciesism," introduced in 1970 (Ryder, 2000), challenges the belief that any being has the moral right to make value judgments on the lives of other living beings (A. Matsuoka & Sorenson, 2018). Addressing speciesism requires de-centring assertions of human superiority over all species, non-human animals, and all living organisms. Highlighting this concept within CAS exposes the often-overlooked anthropocentrism within social work, providing a deeper understanding of how ongoing exploitation, subjugation, and violence toward non-human animals are interconnected with all forms of oppression (A. Matsuoka & Sorenson, 2014, 2018; Sorenson & Matsuoka, 2019).

Furthermore, speciesism is often obscured and misunderstood, shaping perceptions of ethical application. It is commonly misinterpreted as an individual prejudice rather than a structural ideology that normalizes human domination and exploitation of other species. This misunderstanding narrows ethical debates to questions of personal morality or animal welfare, overlooking the systemic nature of violence embedded in institutions and everyday practice. Addressing this oversight requires innovative approaches (Ferreira et al., 2024), such as the

concept of “truncated narratives” (Kheel, 1993, p. 255), which aligns with the use of narrative inquiry in this project. Kheel asserted that “wrenching an ethical problem out of its embedded context severs the problem from its roots,” leading to incomplete or partial representations of issues. Truncated narratives, therefore, represent ethical problems that have been stripped of their social, political, and ecological contexts, resulting in partial understandings of justice. To fully grasp these problems, especially ethical dilemmas commonly embedded in addressing speciesism, it is essential to uncover what has been severed from the narrative (Koleszar-Green & Matsuoka, 2018). This concept combines CAS and narrative approaches to help contextualize and address ethical challenges more effectively. Overall, addressing speciesism offers valuable insights into ecological justice in pursuit of liberation for humans and non-human animals.

Understanding and identifying speciesism as a core concern aligns well with intersectional ecofeminist theory, expanded on below. CAS and ecofeminism require an understanding that “concern for any oppression necessitates concern for all oppression” (Besthorn & McMillen, 2002, p. 227). Through this lens, speciesism calls for a more all-encompassing conceptualization of what it means to address oppression within social work.

Trans-Species Social Justice

Ultimately, CAS fundamentally rejects anthropocentric and speciesist beliefs in human exceptionalism described above—that one species holds higher moral value than all others. Instead, CAS advocates for trans-species social justice, which extends moral consideration and justice to all species (A. Matsuoka & Sorenson, 2014, 2021; A. Matsuoka et al., 2020), aiming to eliminate discrimination against all living beings, human and non-human. This concept supports eco-social work by acknowledging the complex social, political, and cultural beliefs that shape human-animal relationships. It recognizes the link between animal exploitation and broader

forms of oppression, emphasizing the need to challenge hierarchical beliefs. This approach aligns with ecological justice and social work goals, which assert a commitment to well-being and justice for all.

This concept encourages social workers to reconsider animals as beings with rights to an environment that supports thriving. Nussbaum (2006) critically argued that it was unjust if non-human animals were denied the ability to live with dignity and realize their capabilities, including freedom of movement, social relations, stimulation, access to suitable habitats, and the opportunity to experience the full complexity of their lives. Within the framework of trans-species social justice, achieving justice involves creating institutional and environmental conditions free from domination and oppression. In pursuing social justice, CAS scholar John Sorenson (2014) wrote on how political and social concerns must be addressed across species, which requires a deliberate focus on examining power relations, particularly those involving domination and oppression (A. Matsuoka & Sorenson, 2014; Nocella et al., 2014).

Intersectionality and Speciesism

Black feminist scholars were among the first to conceptualize and propose the concept of “intersectionality” (Crenshaw, 1989; Yuval-Davis, 2006), in which class, ethnicity, gender, or race are recognized as interwoven rather than singular (Arathoon, 2024). Within CAS, intersectionality is a foundational tenet (Best, 2007a; Nocella et al., 2014; R. J. White, 2021), where the scope of intersectionality goes beyond humans to address speciesism. Intersectionality reveals interlocking power relationships built on hidden ideologies of speciesism and anthropocentrism. Arathoon (2024) asserted the importance of intersectionality within CAS because it “expands the nodes from which it is possible to unpack how power works in society by taking species as a driver of social construction, experience formation, difference and

inequality seriously” (p. 205, citing Hovorka, 2015, p. 6). Expanding perspective reinforces the need to understand intersectionality as a process of interacting with oppressive power relationships presently and historically, actively shaping social systems (Choo & Ferree, 2010). Including speciesism in understanding intersectionality actively reveals mechanisms and processes of persistent oppressive relationships and affirms the importance of anti-speciesism in social justice.

Intersectional Ecofeminism

The impacts of climate change are not experienced equally across race, class, or other intersections of identity (IPCC, 2021). From increased experiences of gender-based violence following natural disasters to carrying the long-term health impacts of pollution through generations, environmental violence is experienced differently across gender in particular (Muchacha & Mushunje, 2019). Ecofeminism combines feminist theory with ecological beliefs and is considered a social movement and a theoretical framework (Besthorn & McMillen, 2002). In using ecofeminism theory, the parallels of subjugation and exploitation between the natural world and women become glaring (Norton, 2012), as well as how patriarchy has had similar impacts on women, marginalized persons, and the environment (Muldoon, 2006). Feminist theory has historically critiqued the creation of “other” as a highly strategic and political tool to justify oppression and maintain social constructions of difference. This critique can be extended to speciesism and beyond: “The belief in human superiority over other forms of life has resulted in destruction of other species, the environment, and other human beings” (Irvine, 2007, p. 301). Returning to considerations of race and experiences of the other, naming intersectional (Crenshaw, 1991) ecofeminism within this study allowed for attention to the multiple,

overlapping inequalities that shaped how social workers (participants) and those they work alongside (clients) experienced the natural world.

Malin and Ryder (2018) highlighted that much environmental justice scholarship has failed to account for how forms of interlocking and intersecting oppression such as gender, race, class, colonialism, and speciesism intersect in shaping vulnerability and power. A reflection on intersectional theory and how it might be applied to ecological justice research from a feminist standpoint offers important direction for bringing deep ecology into transformative and structural analysis. Importantly, ecofeminism requires understanding that “concern for any oppression necessitates concern for all oppression” (Besthorn & McMillen, 2002, p. 227), which aligns with deep ecology principles and CAS perspectives described above.

There have also been notable connections between ecofeminist theory and North American Indigenous cultures, with shared values including (a) the acknowledgement of a spiritual reality, (b) interconnectedness between all of Earth’s creation and a respect for all living beings, (c) a belief that the Earth itself is living and has agency; and (d) different conceptualizations of power built on values of mutuality and reciprocity (Hoff & Polack, 1993). Klemmer and McNamara (2020) supported a deeper understanding and integration of deep ecology and ecofeminism in social work. Highlighting the history of these concepts and their connection to Indigenous ways of knowing and alignment of ecofeminism with CAS perspectives, “the social work profession would do well to similarly be aware of its ‘incompletion’ as it works toward achieving justice for humans, all sentient creatures, and the nonsentient material of the planet alike” (Klemmer & McNamara, 2020, p. 510). Building on this statement, Klemmer and McNamara identified ecological theory as limiting and a need for social

work to move beyond its current standpoint.

Spirituality

Ecofeminism integrates diverse religious and spiritual perspectives. Bell et al. (2022) defined spirituality as a reverent form of relationship with the Earth as a site or place. Expanding on their understanding of spirituality in ecofeminism, the authors acknowledged both religious and nonreligious tensions, sharing this perspective from Hettinger:

Ecospirituality is not atheistic in the sense of anti-religious, for it locates religious and spiritual significance in the Earth. It has a strongly anti-humanistic bent, not in the sense that it is anti-human, but in its steadfast opposition to the anthropocentrism that sees humans as of ultimate significance and that thinks human life has meaning apart from its context as one expression of the Earth's creative energies (Bell et al., 1995, p. 84).

This conceptualization aligns with the anti-anthropocentric perspectives underpinning this study's theoretical framework. Although spirituality in ecofeminism has been linked to Christianity, it centres on resistance to hierarchical structures, emphasizing interdependence and relationality instead (Bell et al., 2022; Santamaria-Davila et al., 2019). Feminist Catholic theology has contributed to this discourse (Bell et al., 2022; Ruether, 1999) alongside broader eco-spiritual frameworks that honor Indigenous narratives while emphasizing the significance of place (Klemmer & McNamara, 2020). Despite variations in interpretation, a common thread among ecofeminist perspectives is the belief in spirituality as a bridge between gender, ecology, and interconnected ways of knowing, linking care for the Earth with social and relational ethics that affirm mutual dependence among all forms of life.

Narrative Inquiry

Finally, this study incorporated narrative inquiry, which aligns with my epistemological grounding in constructivism and ontological belief in multiple realities. Narrative inquiry is often described as a methodological framework situated within an interpretivist paradigm, and it also carries theoretical implications for how knowledge and experience are conceptualized. Narrative is considered both a theory and a methodological approach (Clandinin & Connelly, 2000). Conceptual clarity has been noted as challenging within this approach, as scholars do not necessarily agree on differences between terms like “narrative inquiry,” “narrative analysis,” and “narrative” (Verhesschen, 2003). In this section, I describe how my understanding of narrative inquiry as a phenomenon supported the theoretical underpinning of this project. In the next chapter, I explain how narrative methodology was used within the research design.

Like CAS, narrative inquiry is inherently multidisciplinary, drawing from literature, psychology, anthropology, education, and organizational sciences (Chase, 2005; Creswell & Poth, 2018). Over the past few decades, scholars have expanded narrative inquiry to include diverse orientations, from postmodernism (Czarniawska, 2004) and sociocultural perspectives (Riessman, 2008) to empirical and quantitative approaches (Elliot, 2005). At its core, narrative inquiry seeks to understand human experiences through storytelling (Clandinin & Connelly, 2000), based on the premise that narratives are “the primary scheme by which human existence is rendered meaningful” (Polkinghorne, 1988, p. 1). This perspective was central to addressing the study’s research aims by exploring human beliefs and meaning-making. Key concepts described below, including temporality, experience, and place, further informed my application of narrative inquiry as a theoretical framework.

Narrative inquiry emphasizes that human experiences are inherently temporal, unfolding over time and shaped by multiple dimensions of temporality (Clandinin & Connelly, 2000). This perspective situates storytelling within specific moments while also recognizing their place within broader life trajectories and historical contexts. Stories are not static but exist in continuous relation to past, present, and future events. Temporality acknowledges the interconnectedness of experiences, as past events shape present understandings, and current interpretations influence future experiences. Temporality in narrative inquiry is not linear; interpretations made in the present can reshape understandings of the past, just as memories and histories influence how the future is imagined. Through this lens, narratives are understood as fluid, relational, and continuously shaped by time.

Closely tied to temporality is the concept of experience, which in narrative inquiry is understood as a temporal process of how humans interact with and interpret the world around them. Experiences exist within specific social, cultural, and personal contexts, shaping beliefs and meanings (Dewey, 1938). Experience, and therefore stories, are not isolated or abstract. Rather, they are embedded within social norms, expectations, and cultural frameworks, all of which influence how stories about experiences are both performed and interpreted (Bruner, 1991). Within this perspective, human knowledge and identity are not fixed but are continuously constructed and revised through experience. This ongoing process highlights the relational dynamic of experience, emphasizing its role in shaping both individual and collective understanding.

Integral to both temporality and experience is the concept of place. As identified by scholars in CAS, place, sometimes also referred to as *spatiality*, has conceptual grounding through narrative inquiry. Place encompasses not only physical settings but also the contextual

influence of those settings on experience and meaning-making (Clandinin & Connelly, 2000). Dewey (1938) further considered place as a multidimensional context intersecting with both time and experience. In narrative inquiry, place is more than a backdrop; it is integral to meaning-making, shaping how humans interact with the world around them. This process is particularly significant in ecological justice, which is concerned with how people relate to, understand, and inhabit different spaces. Through a narrative lens, place-making becomes a central process in the relational construction of knowledge and experience.

Summary

This chapter has established the theoretical and philosophical foundations that underpin this study, drawing from CAS, ecofeminism, and narrative inquiry to challenge anthropocentric world views and dominant positivist epistemologies. CAS highlights the interconnectedness of oppression, emphasizing the importance of trans-species social justice, calling for a more inclusive view of justice that includes all living beings. Narrative inquiry also aligns with my epistemological and ontological perspectives, recognizing storytelling as a legitimate way of knowing and resisting the notion of a singular, fixed truth in favour of multiple, evolving interpretations of experience. By integrating these perspectives, this research sought to amplify diverse voices, including those often overlooked in social and ecological justice discussions, while creating space for the untold stories of the non-human world. With this theoretical framework in place, the next chapter outlines the research methods and design that guided this study. Building on the philosophical assumptions discussed here, I detail the methodological choices that shaped the research process, including the use of mixed methods, narrative inquiry, and quality of research considerations in working toward a more inclusive, justice-oriented approach to ecological and social work practice.

Chapter 4: Research Methods and Design

In this chapter, I describe the mixed research methods employed in the study, aligning them with my philosophical stance, which draws from realist and nominalist perspectives, informed by critical realism. My orientation, discussed in the previous chapter, recognizes that realities exist beyond human perception while also acknowledging that knowledge is shaped through social, cultural, and historical contexts. By holding these positions together, the study resists the anthropocentric assumption that humans are the only legitimate knowers and challenges colonial traditions of research that universalize Western epistemologies as objective truth. Instead, it situates knowledge as relational, partial, and co-produced across human and more-than-human perspectives. Rooted in my ontology and epistemology, my approach draws on CAS, eco-feminism, and narrative inquiry to pursue inclusivity across species and address interconnected oppressions. Building on this theoretical foundation, I detail my research design below, which integrates mixed methods to support my philosophical understandings. I begin by revisiting the study's research questions before describing the two-phase data collection process: an online survey followed by narrative interviews. I then outline my data analysis approach and conclude with a section on how reliability, validity, rigour, credibility, and trustworthiness were considered throughout the research process.

Research Questions

To address a gap in the literature and fulfill my research objectives, this dissertation study aimed to respond the following research questions:

1. How are Ontario social workers engaging in nature-based practices (NBPs) with clients?

2. What do they know and believe about nature and the environment in connection to their practice?
3. What are possible future directions for practice, education, and research?

The following section outlines how the research design, informed by my theoretical framework, aimed to respond to these questions through an online survey and narrative interviews with RSWs in Ontario who identify as practicing nature-based approaches.

Research Design: Mixed Methods

My epistemological and ontological standpoints include constructed and realist beliefs, requiring a mixed method to answer my research questions. This study employs a “sequential explanatory design,” a mixed-methods approach described by Creswell et al. (2003), which unfolds in two phases. First, an online survey gathers quantitative and qualitative data to select participants with rich and critical perspectives, followed by narrative interviews to provide in-depth qualitative insights. The sequential design intentionally integrates the triangulation of data between the two phases of research, enabling the collection of a robust and comprehensive data set (Creswell et al., 2003). The sequential explanatory design supports my positionality across multiple philosophical viewpoints by engaging post-positivist and constructivist methods.

A similar approach has been used to explore the relationship between Ontario social workers and animals in practice from a CAS perspective (Ferreira et al., 2018; A. Matsuoka & Sorenson, 2023). Those two studies’ findings suggested sequential design can be an especially appropriate methodology for gathering initial data when research is exploratory. The authors used data from the survey to help focus the interview questions during Phase 2 and support purposeful sampling (Patton, 2002) of social workers. My present study engaged a comparable process.

Using narrative interviews in Phase 2 within this mixed methodology was also a deliberate choice in alignment with the research perspective and theoretical framework. Engaging in narrative methodologies is not only a valid way of knowing (Strega, 2005), but it also supports alternative ways of knowing and contributes to the decolonization of research methods.

Data Collection: Two Phases

This section outlines two phases of data collection. Phase 1 describes preparation and distribution of the survey, including design, hosting, and participant recruitment. Phase 2 describes design and recruitment for narrative interviews. Data collection took place over two periods: The online survey ran from October to November 2021, followed by narrative interviews conducted between May and September 2022. Given the participation of humans, research ethics approval was sought and received from York University's Office of Research Ethics on September 20, 2021 and renewed on September 1, 2022 and September 18, 2023 (see Appendix A).

Phase 1: Online Survey

Because no studies of this kind have been conducted in Canada, I designed a survey to gather perspectives from social workers in Ontario. The online survey consisted of 21 questions aimed at exploring three key areas. First, the survey examined what participants know and do in relation to nature and social work. Second, it assessed participants' beliefs about the environment and nature-human relationships using a validated instrument called the NEP scale. Third, the survey collected information on the context of participants' social work practice and setting to understand their primary professional environment.

The NEP Scale. The NEP is a quantitative measure of environmental and eco-centric beliefs developed by Dunlap and Van Liere (1978). The NEP Scale consists of statements rated on a 5-point Likert scale, where 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly Agree*. Higher scores on odd-numbered questions indicate pro-environmental beliefs, whereas higher scores on even-numbered questions indicate less environmentally conscious beliefs. Responses to even-numbered items were reverse scored to ensure accurate interpretation before calculating total scores. Since its development, the scale has been revised (Dunlap et al., 2000) and widely used in international research and has demonstrated both constructive and predictive validity (Cordano et al., 2003; Dunlap et al., 2000) as well as internal consistency (A. C. Davis & Stroink, 2015).

Although the NEP Scale is open source, I requested and received written permission from the author to use it in this study (see Appendix B). Including this validated tool within the survey strengthened the rigour and quality of data collected. Although previous studies have used the NEP Scale with social work students (Faver, 2013) and social workers (Shaw, 2013) in the United States, this study represents the first time the NEP Scale has been used with practicing social workers in Canada.

Survey Content and Structure. Participation required informed consent at the beginning of the survey. In addition to the NEP Scale, the survey included four demographic questions that gathered information on race and ethnicity, gender, age, and (dis)ability. These demographic variables provided important contextual insights into the perspectives of participating social workers. The full version of the survey can be found in Appendix C. Before launching the survey, I conducted pilot testing (Creswell, 2021) to ensure that the questions were appropriate in length, clarity, and flow. Three social workers completed the survey and provided

feedback on its structure and readability. The pilot study confirmed that the average completion time was approximately 10 minutes. To further validate the survey's structure and functionality, I conducted technical testing before launching the online survey. This process involved generating placeholder test data and downloading the dataset into SPSS to verify that variable response categories were correctly coded.

Data Monitoring. Once the survey was live, I regularly monitored data to improve validity and reliability. Presser et al. (2004) emphasized the importance of ongoing data checks in online surveys to identify and correct errors early in the data collection process. Following these recommendations, I routinely reviewed the dataset for inconsistencies or missing responses. If errors were identified, I took corrective measures to ensure that the final dataset accurately reflected participants' responses.

Survey Hosting and Data Security. The survey data were collected using SimpleSurvey, which is hosted and supported in Canada. Their servers reside in highly secure, state-of-the-art data centres that meet strict government regulations for hosted services. Data were, therefore, securely stored and protected by Canada's strict privacy laws. The survey was open from October 5, 2021 until November 15, 2021, for a total of 41 days. Once the survey closed, the complete data files were downloaded and saved in an SPSS format to a password-protected USB. All personal information, including names and contact information for those who consented to be included in a participatory inducement draw but did not consent to further participation, was deleted as soon as winners were selected and sent the inducement. Contact information for those who consented to participate in interviews had their unique identifying IDs saved as a separate hard-copy list that was only accessible to me. Using unique identifier IDs not linked to any electronic data ensures that should a digital breach ever occur, personal information

would not be accessible. This approach to data security was paramount to ensure confidentiality and anonymity were protected. This information will remain stored this way until after the completion of the dissertation project, when all data will be permanently deleted.

Recruitment and Sampling. To recruit participants to complete the survey, I created a one-page digital poster that included the survey link (see Appendix D). My target sample size was set at 75–100 social workers from across Ontario to conduct basic quantitative data analysis. The poster was distributed through several online channels, including the OCSWSSW research opportunities webpage. The OASW has an AdMail listserv, which distributed the poster to approximately 7000 members who are RSWs in Ontario. OASW also promoted the survey through their social media accounts via a single post on each of Twitter, Instagram, and LinkedIn, using the poster and a short URL link. I also posted the recruitment flyer to EENet Connect, a research and practice exchange for mental health practitioners in Ontario that includes many social workers. To access the survey, participants had to provide informed consent via a SimpleSurvey landing page (see Appendix E).

Because I could not select participants systematically for the survey and multiple sources were used to meet the target sample size, my method was considered nonprobability sampling (Creswell et al., 2003; Patton, 2002). All survey participants were offered an inducement opportunity to enter a random draw for 1 of 2 \$50 e-gift cards for Indigo.ca (Chapters), regardless of whether they completed the survey.

Survey Analysis and Coding. Quantitative data from the survey were anonymized and analyzed using SPSS for descriptive and inferential analysis (Tashakkori & Teddlie, 2009). The descriptive and inferential analysis allowed me to capture frequencies and run relevant

crosstabulations. The analysis included comparing participants who included nature in practice and those who did not.

Responses to short-answer questions were analyzed using NVivo, a computer-assisted qualitative data analysis program. Borrowing from a grounded theory approach to coding (Charmaz, 2006), responses were initially coded and then recategorized into broader themes using axial coding. Each individual response was categorized into at least one theme or subtheme for each question. Some responses referenced more than one theme and were, therefore, coded into multiple categories.

Phase 2: Narrative Interviews

After identifying the initial themes and key findings from the survey, I began conducting semi-structured narrative interviews (Crossley, 2007) in May 2022 with survey participants who agreed to participate in the second phase. Survey findings affirmed the relevance and organization of interview questions within the interview guide approved by the research ethics committee (see Appendix F for sample topics). The survey results also helped with purposeful sampling for narrative interviews (see Purposeful Sampling section below).

In my capacity as a clinical social worker, I have conducted hundreds of interviews, from psychosocial assessments to program intakes and hiring. I also have significant experience building rapport in short-term settings and have used narrative theory extensively in a therapeutic context. Although confident in my experience and capacity to conduct meaningful interviews, doing so in a research capacity was a significantly different process. Therefore, I engaged in the responsive interviewing model developed by Rubin and Rubin (2012) to provide additional guided interview procedures to elicit “depth and detail, vivid, nuanced answers, rich with thematic material” (p. 2) while building and maintaining the researcher-participant relationship.

The flexibility within this format aligned with my intersectional eco-feminism positionality, which requires an open structure that allows space for story and meaning-making through conversational interviewing (Rubin & Rubin, 2012).

Narrative inquiry as a research method has multiple interpretations, each with distinct approaches to analyzing narratives. In this study, I chose explanatory narrative inquiry (Clandinin & Connelly, 2000; Glover, 2003; Polkinghorne, 1988;), which seeks to “account for the connection between events in a causal sense and provide the necessary accounts that supply the connections,” (Clandinin & Connelly, 2000, p. 16). This approach aligns more closely with what some scholars define as “analysis of narratives” (C. J. Kim, 2015) rather than “narrative analysis” or descriptive approaches to narrative inquiry (Clandinin & Connelly, 2000). An analysis of narratives approach focuses on identifying patterns, categorizing experiences, and developing conceptual understandings from collected stories (Polkinghorne, 1988). This approach differs from narrative analysis, which primarily examines the structure, performance, and themes of individual stories (Clandinin & Connelly, 2000). While narrative analysis emphasizes how a story is told (including linguistic features and narrative structure), the analysis of narratives extracts broader meanings by organizing multiple narratives into categories, drawing comparisons, and identifying overarching themes that explain causal relationships between events (Clandinin & Connelly, 2000, 2015). By engaging in explanatory narrative inquiry, I aimed to move beyond descriptive storytelling and instead examine how participants narratively connected experiences, showing how particular encounters, choices, and contexts lead to shifts in understanding, practice, or relationship, rather than implying any fixed or deterministic causation. This methodological choice enabled a structured approach to

interpreting narratives, ensuring that the research findings contribute to a broader theoretical understanding of the phenomenon under investigation.

Purposeful Sampling. Participants were selected from survey respondents who consented to participate further in the study through one-to-one interviews. I used a combination of purposeful sampling (Guetterman, 2015) approaches in selecting participants to interview, including intensity sampling (Suri, 2011), which selects potential interviewees who can provide “rich examples of the phenomenon of interest” (Patton, 2002, p. 234). Second, I used maximum variation sampling (Patton, 2002), another type of purposeful sampling, which selects potential interviewees to achieve variation in dimensions considered important for understanding the phenomenon being investigated. Because this was a provincial study, I ensured that the interview participants represented Ontario as widely as possible in terms of geography. To achieve this, I used five postal code regions commonly used in Ontario. Given my theoretical framework of intersectional eco-feminism and CAS, I also aimed to explore the gender, racial, and ethnic identities of participants. Participants who demonstrated critical reflection on incorporating nature into their practice in qualitative responses were prioritized, as this selection was expected to yield richer accounts with the study’s focus on meaning-making and ethical engagement.

Use of Technology and Data Security. Given the impact of the COVID-19 pandemic and ongoing public health concerns around in-person contact at the time of research design, I elected to conduct these interviews via the secure video conferencing service provided by GoToWebinar, which has integrated transcription capability. Video recordings will be deleted at the conclusion of the study following publication of the dissertation.

Interview Process. Participants who agreed to participate in the second phase of the study received an email to confirm their interest and schedule an interview at a time convenient

for them. All email scheduling and correspondence samples are outlined in Appendix G. Once an interview time was confirmed, participants were asked to provide informed consent for the interview via email. Once received, I sent a reminder email that contained their GoToWebinar link. At this point, participants also received a link to an inducement of a \$25 e-gift card to Tim Hortons, whether they attended the interview or not. At the beginning of their respective interviews, each participant was again asked to verify verbally their informed consent to participate (see Appendix H).

Narrative research can also be a practice of creativity, adapted in ways that are meaningful to the researcher and participants while enhancing and strengthening the overall research design (Beattie, 1995). Prior to the COVID-19 pandemic, I had hoped to incorporate nature and the natural world into my methodology by conducting research interviews in natural settings. Participants were invited to share an artifact (Creswell & Poth, 2017) that represented their relationship with nature or place in social work practice to bring representation of their connection to nature into a virtual interview context. Anticipated artifacts included a digital photo or piece of artwork that would help “capture visual aspects of the situation” (Kvale, 1996, p. 161). This request added a degree of complexity to the process but also enriched the interviews and served as an icebreaker to develop rapport quickly between me and the participants.

Transcribing Interviews. Interviews were transcribed automatically by GoToWebinar through the recording process, copyedited for accuracy by me, and then redrafted into interim research narratives, which Clandinin (2006) considered as the temporally located written interpretations or summarized stories that researchers use as they analyze and interpret data. Although time-consuming, it felt important to this project to engage in the transcribing process

myself rather than hiring support. Transcribing the data allowed me to revisit the interviews several times and reflect more deeply on the narratives shared by participants through reflexive practices, including journaling.

Analysis of Narratives and Coding. Using analysis of narratives (Polkinghorne, 1988), my coding process involved interrogating complex dimensions of the stories shared and exploring how they related (or did not relate) to broader emerging themes or grand narratives (Harbison, 2007). As much as possible, I looked at whole stories for thematic analysis to protect their integrity (Riessman, 2002). I used the software NVivo to aid in this qualitative data analysis.

In narrative inquiry, the stories are the data, and stories are sacred. Therefore, having a thoughtful and careful plan around the technical process of data analysis and coding was imperative to honouring what participants shared and contributed to my study and understanding. I used Clandinin and Connelly's (2000, p. 54) three-dimensional approach to narrative analysis, which provided a framework for inquiry that considered (a) inward (personal) and outward (social), (b) backward and forward (temporal), and (c) place. The explicit inclusion of the physical environment within this approach to narrative analysis was especially relevant given the focus of this study. The approach also aligned with my use of CAS, which considers the importance of geography, space, and time through spatial emancipation (White & Springer, 2018). Crossley (2007) suggested a 6-step analytic process for narrative inquiry that also guided my analysis process:

- 1) Reading and familiarizing; 2) Identifying important concepts to look for (specifically tone, imagery, and themes); 3) Identifying "narrative tone," 4) Identifying narrative

themes and images; 5) Weaving all of this together into a coherent story; 6) Writing-up as a research report. (p. 10)

This list offers a broad but accurate overview of what my narrative process looked like, combined with Clandinin and Connelly's (2000) more nuanced thematic considerations.

In addition to the three-dimensional approach, other categorization approaches helped guide my process of open coding. For example, emotion coding, which involves identifying and labelling participants' affective expressions within their narratives (Saldaña, 2009), was incorporated to capture emotional dimensions of participants' accounts. This approach gave attention to how participants expressed feelings such as awe, frustration, grief, or connection, which added nuance to the interpretation of their stories. Emotion coding also aligned with my theoretical framework and CAS, which highlights the complexity of emotion in how animal-human relationships are understood (A. Matsuoka & Sorenson, 2019). Additional narrative coding schemes relevant to the open coding process included type, setting, and purpose, which provided insight into the meaning-making social workers engage in while being interviewed (Saldaña, 2009). Importantly, I considered the survey findings and my theoretical framework of CAS, intersectional eco-feminism, and narrative inquiry throughout open and axial coding. These frameworks allowed me to explore how social workers' NBPs and perspectives on mental health might consider beliefs around anthropocentrism, speciesism, and intersections of oppression by identifying stories and examples of animals, hierarchies of human needs, and gender as examples. Throughout my analysis, my own interpretations of the stories were interrogated and challenged through reflexive practices, including reviewing my research journal regularly. My process of open coding occurred iteratively along with axial coding, from which I identified larger themes, as I explore in Chapter 5.

Creswell and Poth (2017) asserted that member checking adds to the trustworthiness of a study. As a means of increasing accountability regarding my interpretations and analysis of what interviewees shared and enhancing trustworthiness, I employed a form of member checking (Creswell & Poth, 2017; Lincoln & Guba, 1985). Some scholars have critiqued member checking because it can assume a singular truth, and because participants' memories or perspectives may shift over time (Angen, 2000; Birt et al., 2016).) To address these concerns, I shared a synthesized summary of key themes rather than full transcripts to invite participants into dialogue around interpretation rather than verification. This approach emphasized the collaborative and evolving nature of meaning-making, allowing participants to reflect on whether thematic synthesis resonated with their perspectives without constraining them to fixed accounts of past conversations. Responses from participants ranged from fascination to appreciation and excitement about reviewing the synthesis. Importantly, none of the participants expressed disagreement or opposition to the themes.

Data Security and Destruction

All survey data were treated as confidential and anonymous. Interview participants' data were also confidential, and all data were anonymized. All research data will be destroyed within 7 years from the date it was collected following analysis and publication. Any hard-copy data will be cross-cut shredded. Electronic data will be deleted and wiped from the-password-protected hard drive and USB at the end of the study. Any data entered and collected using SimpleSurvey was deleted after being downloaded. Data deleted from the SimpleSurvey system is immediately and permanently removed from their production database. All video recordings and transcripts recorded via GoToWebinar were also deleted from the platform immediately after being downloaded and saved.

Quality of Research: Frameworks for Validity, Rigour, and Trustworthiness

Although there is significant debate and critique around establishing criteria for “good” research, demonstrating quality of research design is still important (Padgett, 2016). In designing this study, I used a few frameworks to account for the quality of my research. As a foundation, Lincoln and Guba’s (1985) well-known evaluative criteria for trustworthiness include credibility, transferability, dependability, and confirmability. This grounding was further supported by using the 12 touchstones identified by Clandinin (2013) for what makes a good narrative study, such as the inclusion of story and embedded reflexivity. The following section outlines five of the techniques and approaches I used to ensure my research met a rigorous criterion in demonstrating quality within these frameworks:

Richness and Storytelling

The importance of rich stories that generate thick descriptions is a key measure of validity for this study, which was sought out through the interview sampling process (Lincoln & Guba, 1985) and conversational interview techniques (Rubin & Rubin, 2012). The findings also include detailed, verbatim quotes which serve as a form of thick description, building on conceptual understandings developed by Geertz (1973) and later expanded by Denzin (1989) and Ponterotto (2006). Thick description involves capturing participants' words and the context and meaning behind them, allowing for a deep understanding of their lived experiences (Ponterotto, 2006). This approach aligns with narrative inquiry (Clandinin & Connelly, 2000), which emphasizes the importance of participants’ voices in meaning-making. Denzin (1989) suggested that the inclusion of detailed quotes fosters a stronger emotional connection between the reader and participant perspectives, enhancing the authenticity of the research. Additionally, Wendt and Gone (2012) highlighted the role of rich descriptive quotations in decolonizing methodologies as

they empower participants by centralizing their direct voices in the research process as much as possible. Ponterotto (2006) reinforced this point by stating that thick descriptions require presenting the “adequate ‘voice’ of participants” (p. 547) through long quotes or excerpts of dialogue.

Although there remains a lack of consensus in qualitative research regarding the appropriate use of quotes, Eldh et al. (2020) concurred with H. Noble and Smith (2015), who advocated for incorporating “rich and thick verbatim descriptions of participants’ accounts to support findings” (p. 35). Additionally, Bazeley (2013) argued that longer quotations are particularly valuable when conveying complex emotions and experiences, as they provide readers with deeper insight into participants’ perspectives. Given this study's philosophical stance, including extended participant quotes was methodologically relevant and essential for ensuring depth and authenticity in the findings. Thick descriptions are often used to make the case for transferability (Lincoln & Guba, 1985). Although that is not the goal of this dissertation, “resonance” may be a more appropriate term given that the research study sought to inspire action and change.

Relational Validity

Measures of quality were further supported through additional criteria around writing. In *Validity Issues in Narrative Research* (2007), Polkinghorne provided a helpful perspective on how writing contributes to demonstrating validity in this approach to qualitative research. How I wrote my findings and interpretations was just as important in demonstrating the validity of my research as gathering sufficient evidence and conducting rigorous analysis (Polkinghorne, 2007). I needed to build strong and understandable arguments that justified my interpretations of the findings in my analysis and discussion sections (Crossley, 2007). I also drew on Tuck and

McKenzie's (2015) relational validity perspectives that recognize researcher responsibility as interconnected across species, looking beyond typical Euro-Western research measures such as credibility and reliability (Creswell & Poth, 2017).

Audit Trail

This was a dissertation study, and as such, I was the sole researcher engaged in analyzing data and coding. Having clear and detailed field notes as part of my audit trail was essential to the reliability of my findings (Creswell & Poth, 2017). My audit trail included raw data, original transcripts, and digital recordings of interviews. The trail also included detailed memos throughout the coding and analysis of data (Padgett, 2016). Maintaining access to all data, as well as records of my coding process and decision-making, supported the confirmability and dependability of my process and findings (Lincoln & Guba, 1985).

Triangulation

Several approaches to triangulation were embedded within this study design to increase trustworthiness through enhanced credibility (Lincoln & Guba, 1985). First, the research study aimed to generate complex individual stories and rich analyses that recognized my and participants' subjectivity (Crossley, 2007). In doing so, as outlined in Chapter 3, the project navigated the limitations of constructivism and recognized non-human knowledge. Combining quantitative and qualitative methods supported this by combining human interpretations of experience with attention to the material and ecological perspectives. This integration did not access non-human perspectives directly but created a framework that acknowledged their influence and presence within human accounts. This process is known as methodological triangulation (Padgett, 2016). Harbison (2007) described a valid narrative as "held to be well-grounded in the data, supportable by examples and should be developed by a continuous

recursive process of shuttling between categories of analysis and raw data” (p. 4). This approach was supported through triangulation between data sources (Padgett, 2016), including survey data, interviews, artifacts, and my own field notes.

I engage in theoretical triangulation (Padgett, 2016). Although my frameworks were selected for their interconnected core values, there are some nuances to what each lens provided to the analysis process independently. These multiple perspectives supported analytical triangulation while examining the data. Additionally, I integrated both quantitative and qualitative data analyses, considering them separately and together to effectively address and respond to my research questions. This approach contributed to comprehensive understanding of the data.

Reflexive Journaling

Lincoln and Guba (1985) identified reflexivity as an important criterion for confirmability to begin addressing researcher bias and achieve trustworthiness of a study. It is also a key touchstone Clandinin (2013) highlighted for good narrative research. Therefore, throughout this study, I engaged in meaningful reflexive practices (Wolcott, 2010) to work through my own biases as a researcher. Practices included journaling and diligent memo-writing, especially while engaged in analysis. Charmaz (2014) emphasized the importance of questioning presumptions made about data while coding and at every step of the research process. To interpret narrative data requires taking and writing the stories of others. This act of production requires writing to the power I hold, to know the impact the claims I make will have. Through journaling, a dialectical approach, and asking uncomfortable questions, I actively worked to challenge my own biases.

Journal entries were written after each interview and throughout coding and theme development. They documented emerging interpretations, emotional responses, and theoretical tensions, allowing me to trace how my perspectives shifted in dialogue with the data. Revisiting these entries prompted re-examination of early assumptions, refinement of codes, and greater attentiveness to moments where anthropocentric or normative framings risked being reproduced. In this way, journaling functioned as an analytic tool that linked reflexivity with interpretation, ensuring that meaning-making remained relational, iterative, and accountable to the study's eco-social and narrative commitments.

Summary

This chapter described the mixed research methods employed in this study. I outlined the sequential design, which combined an online survey and narrative interviews to explore how Ontario social workers engage in NBPs. The chapter detailed how participants were recruited, how data were collected and analyzed, and the steps taken to ensure validity, rigour, and trustworthiness. By integrating quantitative and qualitative approaches, the study's carefully structured sequential research design strengthened the quality of the study and ensured a robust foundation for analyzing the experiences and perspectives of study participants. In the following chapter, I present the results from both phases of data collection, offering insights that respond to the research questions guiding this study.

Chapter 5: Findings

This chapter presents findings from the current study on Ontario social workers who integrate NBPs into their work with clients. The chapter is structured in two parts, reflecting the study's sequential mixed methods design. The first section reports on the provincial survey, beginning with participant demographics and then highlighting four key insights from the quantitative and qualitative analysis: (a) social workers incorporate a wide range of NBPs, most commonly walking outdoors, gardening, and animal-assisted practices; (b) demographic characteristics such as age, gender, or years of practice did not significantly influence NBP engagement; (c) although some eco-centric beliefs were evident, they were not strong predictors of practice; and (d) beliefs about NBPs were framed largely in anthropocentric terms. The second section of the chapter turns to narrative interviews, which deepen and complicate these findings by illuminating NBPs as relational praxis rather than discrete interventions. Four central themes emerged: (a) NBPs as co-created and co-navigated in relation with clients, (b) NBPs in relation with the more-than-human world, (c) NBPs as forms of relational resistance that challenge institutional and systemic constraints, and (d) NBPs as gestures toward relational futures oriented around liberatory eco-social praxis. Together, these themes reveal how social workers are not only integrating nature into practice but also reshaping professional norms through everyday acts of creativity, resistance, and relational care. The chapter concludes by integrating findings across both phases, demonstrating how they collectively address the study's three research questions and lay the groundwork for interpretive analysis in the discussion chapter.

Phase 1: Survey Findings

When the survey closed, 156 responses had been received. After removing duplicate or spam entries ($n = 29$), blank responses ($n = 30$), and those who did not meet eligibility criteria, including lack of consent ($n = 1$), not being a RSW ($n = 2$), or not residing in Ontario ($n = 4$), a valid sample of 90 participants remained. This number aligned with the original target of 75–100. To refine the analysis, I categorized participants into those who reported including nature in their practice ($n = 61$) and those who did not ($n = 29$). Initial crosstabulations revealed no significant demographic or professional differences between these groups; this lack of distinction should be considered in future studies. However, given that the central focus of this dissertation was to bridge practice and theory, the findings reported in this chapter draw exclusively on the 61 participants who reported actively integrating NBPs into their work with clients. This focus enables a more in-depth analysis of the practices, tensions, and possibilities that arise when nature is actively incorporated into social work.

Demographic Summary

Of the 61 respondents who completed the survey and met the inclusion criteria, over half identified as women ($n = 35$, 57.4%), and men comprised less than one fifth of the sample ($n = 11$, 18.0%). Two respondents identified as gender fluid ($n = 1$, 1.6%) and nonbinary ($n = 1$, 1.6%). Respondents' ages ranged from their 20s to 70s, with the largest groups in their 30s ($n = 18$, 29.5%) and 40s ($n = 17$, 27.9%), suggesting that NBPs were most commonly practiced by mid-career social workers. Racial and ethnic identities were predominantly White ($n = 44$, 72.1%), followed by South Asian, East Indian, or Sri Lankan ($n = 7$, 11.5%) and First Nations or Métis ($n = 5$, 8.2%). Two respondents identified as Jewish ($n = 2$, 3.3%), one as Indo-Caribbean ($n = 1$, 1.6%), and one as "other" ($n = 1$, 1.6%). Additionally, 10 respondents (16.4%) identified

as persons with a disability. Geographically, respondents were distributed across Ontario, with the largest groups from Southwestern Ontario ($n = 17$, 28.8%) and South Central Ontario ($n = 16$, 27.1%), followed by the city of Toronto ($n = 10$, 16.9%), Eastern Ontario ($n = 9$, 15.3%), and Northern Ontario ($n = 7$, 11.9%). Although the sample included some diversity in terms of gender, race, ability, and geography, the overall profile was concentrated among White women in their 30s and 40s, living without a disability in Southwestern and South Central Ontario. At the same time, respondents represented a wide range of professional settings and client populations, including private practice, hospitals, community agencies, schools, and postsecondary institutions, underscoring the breadth of practice contexts in which NBPs are emerging. The overall demographic alignment reflects broader trends in Canadian social work but also underscores limitations in capturing the perspectives of racialized, Indigenous, and gender-diverse social workers whose experiences with NBPs may differ. Demographic details, including participants' professional focus and geographical locations, are provided in Appendix I.

Social Workers in Ontario Include Different Types of NBPs

Beyond demographic profile, the survey results demonstrate that social workers in Ontario are actively incorporating nature into their practice with clients. In the survey, participants were asked to indicate all types of NBPs they typically used. More than half (54%) selected multiple items, reflecting the diverse ways social workers integrate nature into their work. Almost all ($n = 55$, 90.2%) reported engaging in outdoor activities such as walking sessions, followed by gardening ($n = 20$, 32.8%), animal therapy ($n = 17$, 27.9%), land-based healing ($n = 16$, 26.2%), and, less commonly, climate justice advocacy ($n = 4$, 6.6%). None selected farming as part of their practice (see Table 1).

Table 1

Survey Descriptive Statistics for “if Yes, what nature-based activities do you typically include?”

Item	<i>n</i>	%
Outdoor activities (e.g., walking therapy)	55	90.2
Gardening	20	32.8
Animal therapy (AAA, AAI, AAT, equine)	17	27.9
Land-based healing	16	26.2
Climate justice advocacy	4	6.6
Farming	0	0
Other	16	26.2

Note. *N* = 61; AAA = animal-assisted activities, AAI = animal-assisted intervention, AAT = animal-assisted therapy.

Participants who chose the “Other” category described a range of additional activities. Outdoor practices included encouraging clients to spend time outside, eco-social sports and outdoor behaviour activation, individual and group counselling outdoors, forest bathing (Shinrin-Yoku), mindfulness in nature, and nature retreats. Indoor or hybrid practices included using natural objects for self-regulation, growing potted plants at home, incorporating nature-based metaphors and conversations, playing bird sounds in virtual sessions, and, in some cases, nature-based art therapy and Indigenous ceremonies.

The survey revealed that most nature-based activities took place outdoors, although some also occurred indoors, online, or across multiple settings. Notably, more than a quarter of participants engaged in animal-related practices (animal-assisted activities, animal-assisted intervention, animal-assisted therapy, and equine therapies), demonstrating that questions of anthropocentrism and more-than-human ethics are not abstract but directly implicated in everyday practice. By contrast, very few participants reported climate justice advocacy, raising questions about whether this reflected limited knowledge, discomfort with advocacy, or

institutional barriers within social work contexts. The absence of farming practices may reflect the small sample size or urban orientation of participants, yet it remains notable given agriculture's central role in climate change and food justice.

To the best of my knowledge, this is the first study to empirically examine whether Ontario social workers engage in NBPs. The findings confirm that such practices are already in use, though in diverse and sometimes nuanced approaches. This study establishes a critical foundation for deeper inquiry into how and why social workers integrate nature into their work, reinforcing the need to examine both the relational and structural dimensions of eco-social work practice.

Demographic Factors and Engagement in NBPs

As outlined in the methodology, crosstabulations were conducted to explore whether demographic characteristics shaped how social workers engaged in NBPs. For this analysis, responses to the types of nature-based activities (see Table 1) were compared against demographic survey questions (Q9–Q18). Categories within each variable were isolated, with all other responses collapsed, to run bivariate analyses. Overall, the results indicated no statistically significant differences by demographic factors such as age, gender, racial identity, or professional role. That is to say, the demographic factors did not consistently influence whether or how participants engaged in NBPs. Only four isolated instances of statistical significance were noted, and these did not form a coherent trend across the data.

Age and Years Practicing Post-Social Work Degree

The relationship between NBPs (as described in Table 1) and age presented a statistically significant correlation. A chi-square test suggested that social workers aged 20–40 were less likely to include animal therapy (animal-assisted activities, animal-assisted intervention, animal-

assisted therapy, equine) than those aged 50–70, $\chi^2(1, N = 60) = 10.924, p < .001$, with a strong negative relationship ($\phi = -.427$). Similarly, a chi-square test revealed that social workers with 20 or more years of practice were more likely to use animal therapy than those with 0–19 years, $\chi^2(1, N = 60) = 5.156, p = .023$, with a weaker effect size ($\phi = -.293$). These findings may reflect overlap between age and years of experience, suggesting a potential spurious relationship. It is possible that over time, through accumulated experience and seniority, social workers develop strategies for navigating barriers to inclusion or gain greater autonomy in choosing their practice settings. However, the small sample size limits the reliability of these results and underscores the need for further investigation.

Primary Work Focus

Each type of NBP was also examined in relation to primary work focus (Q10). Only two statistically significant relationships were identified, suggesting that work focus did not strongly predict engagement in specific NBPs. First, participants focusing on individual/behavioural problems did not report any use of gardening, leading to a statistically significant result. Because 20% of cells violated the assumption of expected counts, the likelihood ratio was used. The relationship was significant, $\chi^2(1, N = 60) = 10.116, p = .001$, with a moderate negative effect ($\phi = -.335$). This result suggests that social workers focusing on individual/behavioural problems were less likely to include gardening in their practice compared to those with other work focuses. The absence of gardening in this subgroup, alongside only modest uptake elsewhere, suggests that sample size may have influenced this result, and further exploration is warranted.

Second, a chi-square test of independence was conducted to assess the relationship between a health-focused practice and the inclusion of animal therapy. Again, the likelihood

ratio was used due to violations of expected counts. The result was significant, $\chi^2(1, N = 60) = 4.042, p = .044$, with a moderate positive effect ($\phi = .274$), suggesting that social workers with a health-focused practice were more likely to include animal therapies than those with other areas of focus. One possible explanation is that social workers committed to animal therapy may intentionally seek practice settings where it can be incorporated, or that health-focused environments more open to these approaches. Alternatively, the finding may reflect sample-specific dynamics rather than a broader trend, highlighting the importance of cautious interpretation.

Overall, the crosstabulation results suggest that older or more experienced social workers were more likely to use animal therapy. However, these patterns remain tentative due to the small sample size. Rather than conclusive evidence, they point to an area for future research on how professional experience and workplace context might shape the adoption of NBPs such as animal therapy and gardening.

Eco-Centric Beliefs Were Not a Strong Indicator of NBP Inclusion

The NEP Scale was incorporated into the survey to examine the core beliefs and values that Ontario social workers held about nature-human relationships, directly addressing the study's second research question. A total of 60 participants ($n = 60$) completed at least one NEP Scale item. Across the scale, standard deviations were relatively consistent, and responses to individual items showed clustering, suggesting a shared orientation among participants. The NEP Scale demonstrated acceptable internal consistency ($\alpha = .70$), supporting its use as a reliable measure of ecological worldview within this sample. Itemized results, categorized by belief and reported with measures of central tendency, are presented in Table 2.

Table 2*New Ecological Paradigm Scale*

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Mdn	Mode	Min-max	% ^a
Anti-anthropocentrism							
8-7 Plants and animals have as much right as humans to exist.	60	4.45	0.81	5	5	1-5	91.6
8-2 Humans have the right to modify the natural environment to suit their needs.	60	2.02	0.89	2	2	1-4	11.7
8-12 Humans were meant to rule over the rest of nature.	60	1.52	0.98	1	1	1-5	6.6
Limitations of Earth							
8-6 The Earth has plenty of natural resources if we just learn how to develop them.	58	3.28	1.21	4	4	1-5	55.2
8-11 The Earth is like a spaceship with very limited room and resources.	60	3.33	1.03	4	4	1-5	51.7
8-1 We are approaching the limit of the number of people the Earth can support.	60	3.42	1.07	3	3	1-5	48.4
Balance of nature							
8-3 When humans interfere with nature it often produces disastrous consequences.	60	3.95	0.87	4	4	1-5	81.6
8-13 The balance of nature is very delicate and easily upset.	60	3.60	1.10	4	4	1-5	63.4
8-8 The balance of nature is strong enough to cope with the impacts of modern industrial nations.	59	1.80	0.97	1	1	1-4	6.7
Exemption from nature							
8-9 Despite our special abilities, humans are still subject to the laws of nature.	59	4.46	0.77	5	5	1-5	93.3
8-4 Human ingenuity will ensure that we do not make the Earth unlivable.	59	2.92	1.13	3	3	1-5	32.2
8-14 Humans will eventually learn enough about how nature works to be able to control it.	60	1.97	0.93	2	1	1-4	6.7
Ecological crisis							
8-5 Humans are seriously abusing the environment.	60	4.37	0.80	4	5	1-5	95
8-15 If things continue on their present course, we will soon experience a major ecological catastrophe.	60	4.37	0.73	4.5	5	2-5	88.3
8-10 The so-called "ecological crisis" facing humankind has been greatly exaggerated.	59	1.53	0.91	1	1	1-5	5.0

^a % indicates percentages of the combined *Agree* and *Strongly Agree* responses.

Analysis of NEP Findings

The NEP results (see Appendix I) reveal a complex and sometimes contradictory set of ecological beliefs among respondents. On one hand, there was strong endorsement of anti-anthropocentric principles: Nearly 9 in 10 (88%) agreed that “plants and animals have as much right as humans to exist,” and only a small minority (8%) supported the view that “humans were meant to rule over the rest of nature.” Similarly, questions on human exemption from nature showed widespread rejection of human exceptionalism, with 93% agreeing that “despite our special abilities, humans are still subject to the laws of nature,” and only 7% expressing confidence that humans could eventually control nature. These findings suggest that many participants conceptually aligned with perspectives that challenge human-centred hierarchies. At the same time, however, responses reflected ambivalence about Earth’s limits and human innovation. Just over half (52%) agreed that “the Earth is like a spaceship with very limited room and resources.” In comparison, a similar proportion (55%) supported the more optimistic claim that “the Earth has plenty of natural resources if we just learn how to develop them.” Almost one third (32%) agreed that “human ingenuity will ensure that we do not make the Earth unlivable,” highlighting the persistence of technological optimism alongside critiques of human dominance. These results suggest uneven ecological literacy and reveal tensions between rejecting human supremacy and maintaining faith in human capacity to resolve the ecological crises.

Consensus was more apparent when participants were asked about the ecological crisis and the balance of nature. A majority (82%) agreed that “when humans interfere with nature, it often produces disastrous consequences.” In comparison, only 7% endorsed the belief that “the balance of nature is strong enough to cope with the impacts of modern industrial nations.” Nearly all participants (95%) agreed that “humans are seriously abusing the environment,” and 88%

affirmed that “if things continue on their present course, we will soon experience a major catastrophe.” By contrast, only 5% believed the ecological crisis had been exaggerated. These findings confirm broad recognition of both the reality and urgency surrounding the ecological crisis, as well as strong acknowledgment of human culpability in producing environmental harm. Yet, they also suggest that participants may have framed these crises through paternal or anthropocentric perspectives, positioning humans as stewards responsible for managing or repairing damage rather than recognizing the self-regulating capacities of ecosystems. Collectively, these results demonstrate that although many social workers in this study rejected overt anthropocentrism, their beliefs were not uniformly eco-centric. Instead, they reflected a contested and transitional terrain in which anti-anthropocentric commitments coexist with residual anthropocentric assumptions and technological optimism.

Bivariate Analysis of the NEP Scale

Additional analysis of the NEP findings included a bivariate analysis of responses to individual items and demographic questions. No significant differences emerged between demographic characteristics and NEP responses, suggesting a relatively homogenous sample. This lack of variability could be attributed to the small sample size. It also highlights the need for a deeper understanding of why social workers incorporate NBPs into their practice and how they effectively implement them. The absence of significant results may indicate that beliefs alone are not a key factor in incorporating NBPs, with other factors such as opportunity, knowledge, or systemic barriers playing a more critical role. Narrative interviews in Phase 2 helped further explore these questions. Future research should also examine the eco-social work beliefs of social workers who explicitly do not engage in NBPs.

Overall NEP Score and Findings

As detailed in Chapter 4, the NEP Scale generates a total score to assess pro-environmental beliefs. Among survey participants who completed the scale ($n = 58$), the average score was 59.7, with a median of 59.5 and a mode of 61. Although these scores suggest a generally pro-environmental orientation, they do not explain why some social workers translated these beliefs into practice while others did not. In Chapter 6, I situate these findings alongside comparable studies to consider how the ecological orientations of Ontario social workers align with or diverge from broader professional trends. At this stage, the results suggest that pro-environmental beliefs, as measured by the NEP, may not be a reliable predictor of NBP inclusion. This finding raises questions about the role of practice contexts, professional identity, and relational dynamics that are explored further in the discussion.

When considered as a whole, the NEP findings suggest that although respondents broadly rejected human domination of nature and recognized human-driven ecological harm, their responses also revealed areas of ambivalence, particularly regarding the planet's resource limits and the role of human ingenuity. These tensions indicate a partial yet uneven shift away from anthropocentrism. They highlight that ecological beliefs alone may not account for the adoption of NBPs: Social workers may hold broadly pro-environmental views yet remain constrained by institutional settings, professional norms, or the framing of nature as primarily serving human therapeutic needs. Additionally, with no significant demographic differences explaining the variation in NEP responses, the findings highlight the value of qualitative exploration in understanding how ecological beliefs interact with professional identity and practice contexts.

Primary Reasons for NBPs: Emphasis on Human Well-being

Although the NEP results provided a more structured depiction of respondents' ecological beliefs, open-ended survey questions offered an additional nuanced view of how those

beliefs, experiences, and professional commitments were translated into practice. This section presents results from the open-ended survey question: “What are your primary reasons for including nature in direct social work practice with clients?” All 61 respondents provided their reasons. Across the sample, respondents emphasized the restorative and healing qualities of nature, frequently framing it as a resource for balance and well-being. At the same time, the ways these benefits were understood and applied varied considerably. To capture this range, I coded responses into five themes: (a) enhancing therapeutic techniques, (b) meaning and impact on clients and communities, (c) accessibility and physical benefits, (d) enhancing social justice, and (e) social connection during COVID-19.

Enhancing Therapeutic Techniques for Human Well-Being

Nearly half the respondents cited their primary reason for incorporating nature into practice as its capacity to enhance therapeutic techniques. Nature was portrayed either as a tool to support intervention or as a context that facilitated therapeutic engagement. The most frequently mentioned approach was grounding: Social workers reported teaching clients somatic exercises that involved physically touching the ground, orienting through sensory awareness, or, in one case, engaging in equine therapy. Mindfulness was also repeatedly linked with nature, including mindful walking, breathing practices, meditation, and storytelling. As one participant explained:

Nature assists in calming the body and mind. It helps people to become more aware of their surroundings regarding their senses. Nature gives many offerings for healing work. Nature restores. Nature helps people go within, to seek what they need, and quiets the mind. (Survey Respondent 036)

Similar descriptions by other participants emphasized the role of nature in fostering relaxation, calmness, and therapeutic focus. Other techniques mentioned included emotional regulation, externalizing problems, developing coping strategies, and improving client engagement. Although a few participants hinted at the agency of nature as an active collaborator, most accounts reflected a human-centred, utilitarian orientation, positioning nature as valuable primarily for its therapeutic benefits to clients. This emphasis underscores a central tension in the study: Even as NBPs created space for alternative forms of relational practice, they often remained framed within anthropocentric perspectives that prioritized human well-being.

Meaning and Impact on Clients and Communities

Although most accounts emphasized the therapeutic benefits of NBPs for clients, participants also frequently described how clients' desires and cultural ties influenced their decision to incorporate nature into their practice, whether through walking, hiking, or simply being outside rather than in an office. Client feedback highlighted feelings of increased connection and engagement when nature was part of their care. Cultural ties also emerged, though less frequently. One respondent noted,

Nature is a resource for all humans, being creatures of this planet, not of the buildings we build. Many clients are strongly connected to water, earth, elements, landscape, placing self on the land. Encouragement for practice of experiential places in nature, valuing of Indigenous values, concept of land-back. (Survey Respondent 836)

Such reflections highlight that NBPs can intersect with cultural memory, spiritual practice, and community belonging, even if these perspectives were less common in a predominantly White sample. Respondents also identified particular client groups, including children, youth, older adults, Indigenous communities, and those experiencing anxiety, depression, trauma, or dementia

as especially well-suited to NBPs. Some respondents referenced research supporting these practices, with most framing the benefits in human-centred terms. Overall, this theme demonstrates how NBPs may be valued for their meaning and impact on clients and communities, but primarily through an anthropocentric lens. A few narratives opened up toward decolonial and relational possibilities, but most accounts reinforced the instrumental role of nature in human well-being.

Accessibility and Physical Benefits

Building on respondents' emphasis on meaning and impact, another theme highlighted the accessibility and physical benefits of engaging with nature. Many respondents described nature as widely available and low-cost, particularly through outdoor practices such as walking, hiking, or mindful movement. Frequently cited benefits included physical exercise, improved air quality, sensory engagement, and exposure to sunlight. Some described structured practices such as forest therapy (Shinrin-yoku), yoga, or stargazing, and others mentioned more informal, embodied engagements like time outdoors or interaction with animals. One participant, for example, noted how clients living on farms drew comfort and support from their relationships with animals:

Some clients need concrete, somatic-based connections to calm traumatic reactions. I also do home-based treatment and have clients living on farms. Their connections to their animals are a source of comfort, a place where they don't feel judged and a support system. (Survey Respondent 789)

This respondent did not indicate farming as a formalized NBP (which no respondents selected in the survey), but this example highlights how social workers sometimes engage with clients' pre-existing relationships to place and animals.

At the same time, respondents acknowledged physical barriers. Clients in institutionalized settings, those with mobility challenges, or those living in urban areas without safe green spaces often face constraints on their ability to engage in NBPs. Some social workers noted that they offered outdoor therapy only to clients who could participate safely, and others emphasized helping clients navigate obstacles to accessing therapy outdoors. Overall, responses framed nature as both a resource for physical health and a therapeutic modality, yet primarily through a human-centred lens. Systemic and geographic barriers highlight uneven opportunities for clients to engage in NBPs, underscoring the importance of critically examining whose bodies, movements, and relationships are made possible within the concept of “accessible” nature.

Enhancing Social Justice

A smaller group of respondents ($n = 5$) articulated explicit, critical perspectives on incorporating nature into practice, linking NBPs to social justice, climate change, and critiques of conventional therapeutic norms. For some, inclusion of nature in practice was seen as a way to disrupt dominant frameworks: “There’s also something about getting out of Whiteness and maleness in terms of therapy and doing things that are much more creative” (Survey Respondent 571). Others tied NBPs to personal experiences of marginalization and resilience. One racialized newcomer described how proximity to land shaped their well-being:

Nature helps individuals unwind and relax. I believe the cause of a lot of the stressors in people’s lives can be attributed to the current fast-paced lifestyle and demands, mostly living in urban sprawls. Based [on] my life experience, moving to a rural part of Canada was very liberating to my mind. Being a racialized person who is a new immigrant was challenging considering prevailing racism in Canada, but my resilience and fight for

equity helped me in the process. I am much more calmer and I believe the quality of my mental health has improved living closer to nature. (Survey Respondent 275)

Such reflections suggest that for some social workers, NBPs are not merely therapeutic techniques but also pathways for navigating intersections of race, gender, and structural inequities.

Only one respondent explicitly linked practice to the climate crisis, calling for social work to find “ways to re-build our relationship to nature” (Survey Respondent 245). Others described nature as a holistic and creative practice that resisted the confines of office-based, clinical models of care. Although these perspectives were limited in number, they underscore how NBPs can intersect with broader justice struggles, including racial equity, gendered norms, and ecological sustainability. Given that liberation across species is central to this dissertation’s theoretical framework, these accounts mark important openings for further exploration in Phase 2. These reflections also illustrate how intersectional ecofeminist perspectives are relevant for understanding NBPs, since they foreground how overlapping systems of race, gender, migration, and ecological harm shape both barriers and openings in practice.

Social Connection During COVID-19

Several respondents also identified COVID-19 as a catalyst for moving their practice outdoors, emphasizing both the need to address client isolation and the practical necessity of continuing in-person work when indoor sessions were restricted. Social workers described meeting clients in parks, sitting on benches or picnic tables, and incorporating walking into counselling sessions as ways to combine safety, movement, and therapeutic engagement. One respondent noted that equine therapy was offered when community funding was available, illustrating how institutional resources also shaped the feasibility of NBPs. Although some

respondents indicated they had already been integrating nature before the pandemic, the shift to outdoor practice during COVID-19 broadened its relevance, highlighting NBPs as both responsive adaptations and intentional therapeutic strategies. These accounts underscore how practice contexts can accelerate innovation, expand the range of accepted therapeutic spaces, and normalize relational practices beyond traditional office settings.

Additional Survey Comments

At the end of the survey, respondents were invited to share additional thoughts, with the majority ($n = 51$) answering. Most elaborated on earlier responses, reinforcing the belief that incorporating nature into practice benefits both clients and social workers. Some of the highlighted barriers they experienced included employer liability concerns, a lack of education or training, and the impracticality of outdoor practices for specific clients. A few respondents offered additional critical perspectives, including one respondent who observed,

Most of our current clinical interventions are built as a response to capitalism/colonialism/patriarchy, where we focus on the individual. In these types of interventions, our inter-relationship to Nature is largely ignored. If social workers are to integrate Nature into their practice, we need to think of how we are doing this and why (for what purpose). I believe that we need to cultivate a reciprocal relationship to nature, where we are not only taking but also giving back, hence the importance of shifting towards an ecocentric paradigm. (Survey Respondent 245)

This respondent's perspective challenges human-centred approaches and calls for a reciprocal, ecocentric framework in social work. Others connected NBPs to land-back movements, refugee resettlement, and the harms of institutionalization. These responses, though less common, highlight emerging critical perspectives and underscore the importance of exploring such themes

more deeply in the narrative interviews.

Summary of Reasons for NBPs

The qualitative analysis of respondents' reasons for incorporating NBPs revealed five central themes: enhancing therapeutic techniques, client and community impact, accessibility and physical benefits, enhancing social justice, and connection during the COVID-19 pandemic. Consistent with survey data, outdoor activities such as walking were the most commonly described NBPs by respondents, although less conventional practices were also shared, including forest bathing, yoga, and stargazing. Across these varied approaches, a consistent thread emerged, emphasizing the benefits of nature for human well-being. This focus highlights a primarily anthropocentric orientation, even as some NEP Scale responses and critical reflections pointed toward more ecocentric or justice-oriented perspectives. These findings suggest that although social workers recognize the value of NBPs, their rationale often remains human-centred, underscoring the importance of exploring how deeper ecological or multispecies commitments might be cultivated.

Phase 1 Conclusions: Key Findings from Survey Results

The survey findings demonstrate that Ontario social workers are already incorporating NBPs in diverse ways, most often outdoors but also indoors and online. Practices ranged from walking therapy and mindfulness outdoors to forest bathing, stargazing, yoga, and animal therapies such as equine therapy. Notably, no significant demographic factors (age, gender, education, geography) were associated with engagement, suggesting that systemic conditions may be more influential than individual characteristics. The absence of farming or farmed animals, and the limited uptake of climate justice advocacy suggest possible broader knowledge gaps, institutional barriers, and resource constraints that shape what forms of NBP are feasible.

A second key finding is that ecological beliefs did not predict engagement with NBPs. Although NEP Scale results indicated broadly pro-environmental orientations, these were not strongly correlated with practice choices. Instead, engagement appeared more context-dependent, shaped by opportunity and institutional support rather than belief alone. This finding complicates assumptions in eco-social literature that ecological commitments naturally lead to ecological practice, underscoring the importance of examining structural and professional contexts. I explore this finding further in Chapter 6.

Finally, the survey revealed tensions between respondents' stated beliefs and their practices. Many affirmed anti-anthropocentric views (e.g., rejecting human dominance and affirming non-human rights), but the rationale for NBPs was primarily framed in terms of benefits to human clients, including emotional regulation, mindfulness, and physical health. Even when animals or ecological relationships were included, they were often positioned as tools for human well-being. Only a small number of respondents explicitly articulated eco-centric or justice-oriented perspectives, such as connections to Indigenous land-based teachings or critiques of colonial paradigms. These findings underscore the need for a deeper exploration of how social workers navigate the tension between ecological beliefs and anthropocentric practices, a central focus of the narrative interviews in Phase 2.

Phase 2: Narrative Interviews

Building on the survey results from Phase 1, the second phase of this study examined how Ontario social workers understand their engagement with NBPs. The purpose of this phase was to move beyond descriptive accounts toward a deeper exploration of social workers' beliefs, values, and experiences, and to consider how they envision the future of social work education, research, and practice. Narrative interviews were conducted in English using the purposeful

sampling framework outlined in Chapter 4. Thirty social workers were invited to participate, and 15 agreed. Interviews were conducted over a 2-month period during the COVID-19 pandemic, with each lasting approximately 1 hour (average duration: 56 minutes). This phase generated rich, situated accounts that provide critical insight into how social workers navigate the relational, ethical, and structural dimensions of NBPs.

Interview Participant Demographics

A total of 15 survey respondents participated in narrative interviews. As outlined in Chapter 4, this study engaged in purposeful sampling, prioritizing diverse identities, including racial and gender identities, as well as geographical locations. Regarding ethnic and racial identity, the efforts to include diverse voices was successful and 33% ($n = 5$) interviewees identified as Black, Indigenous, or Persons of Colour and 67% ($n = 10$) as White. Primary Black, Indigenous, or Persons of Colour racial and ethnic identities included South Asian ($n = 2$), Métis ($n = 1$), Indo-Caribbean ($n = 1$), and multiracial ($n = 1$). The majority identified as women ($n = 9$, 60%), with ($n = 4$, 26.7%) identifying as men, and ($n = 2$, 13.3%) individuals as non-binary or fluid. Geographically, participants were mostly located in Southwestern Ontario ($n = 5$, 33.3%) and Northern Ontario ($n = 4$, 26.7%), with a smaller number from South Central Ontario ($n = 3$, 20.0%) and Eastern Ontario ($n = 3$, 20.0%). Notably, no interview participants resided in the City of Toronto (0%), though South Central Ontario includes the Greater Toronto Area. Regarding disability, the majority did not identify as having a disability ($n = 9$, 60.0%), 33.3% ($n = 5$) did, and one participant ($n = 1$, 6.7%) preferred not to specify. Most participants were in their 30s ($n = 4$, 26.7%) or 40s ($n = 5$, 33.3%), with smaller numbers in their 50s ($n = 2$, 13.3%) and 60s ($n = 3$, 20.0%). Only one participant was in their 20s. The demographic profile of interview participants broadly reflected the survey sample, with both groups concentrated among White,

women, mid-career social workers in their 30s and 40s. At the same time, the interview sample reflects efforts to purposefully recruit participants with varied identities. Detailed demographics are provided in Table 3.

Table 3

Survey Demographics & Descriptive Statistics for Age, Gender, Ethnic/Racial Identity, Disability, and Geography: Interview Participants.

	Demographic	<i>n</i>	%
Gender <i>n</i> = 15	Woman	9	60.0
	Man	4	26.7
	Non-Binary/Fluid	2	13.3
Age <i>n</i> = 15	20s	1	6.7
	30s	4	26.7
	40s	5	33.3
	50s	2	13.3
	60s	3	20.0
Primary racial/ethnic identity <i>n</i> = 15	White	10	66.7
	South Asian	2	13.3
	Metis	1	6.7
	Other (Ethnically Diverse)	1	6.7
	Indo-Caribbean	1	6.7
Persons with a disability <i>n</i> = 15	No	9	60.0
	Yes	5	33.3
	Prefer to not specify	1	6.7
Geographic location <i>n</i> = 15	Southwestern Ontario (N postal code)	5	33.3
	Northern Ontario (P postal code)	4	26.7
	South Central Ontario (L postal code)	3	20.0
	Eastern Ontario (K postal code)	3	20.0
	City of Toronto (M postal code)	0	0

Additional Participant Details

Expanding on the demographic summary provided above, I created narrative summaries that characterize each interview participant, adding additional layers of dimension to the stories

told and analyzed in this chapter (Appendix J). Specific details have been omitted or renamed to maintain anonymity, and all participant names are pseudonyms. The character descriptions include interview participants' practice experiences, as well as their interpretations of local geography and theoretical orientation as they described them. Some additional details were included for participants who shared stories or details about their personal relationships with nature.

Participant Artifacts

Interview participants were asked to share an artifact representing their connection to nature in practice. The format was open, resulting in diverse contributions, including stories, songs, images, and natural objects. One participant created a collage of meaningful images and words after the interview, and another described a song in their native language about social justice and colonial resistance. Most artifacts depicted meaningful outdoor spaces, such as forests, oceans, trails, gardens, and porches. Participants also shared objects made of natural materials, including items created with family, clients, or loved ones. Examples included a carved stick, sand and seashells in a jar, a bark canoe, a basket, and compost made from reclaimed wood. Some artifacts, such as textured rocks and wooden carvings, were used directly with clients, while others, including the collage and song, reflected deeper spiritual and cultural meanings. The inclusion of artifacts reflected my understanding that narratives are not confined to spoken or written words but can be expressed materially, visually, and musically. This approach, as demonstrated in this chapter, deepened the narrative process by enabling participants to communicate experiences that might have been difficult to articulate verbally, and by creating opportunities for more personal, cultural, and spiritual dimensions of practice to

emerge. These artifacts have been integrated into the thematic analysis below and are referenced where relevant to the findings.

Defining NBPs

The artifacts shared by participants illustrate how nature was woven into their practice in both material and symbolic ways. Expanding on these insights, NBPs in this study were described as occurring within diverse ecosystems, including forests, fields, cemeteries, balconies, gardens, and digital screens. Participants engaged with nature through physical activities such as walking, biking, stargazing, or berry picking; sensory grounding practices like mindfulness and forest bathing; and symbolic or metaphorical integration through storytelling, observation, and reflection. Nature was defined relationally and expansively, with participants referencing interactions with animals (primarily wild and domestic), weather patterns, plants, rocks, celestial bodies, and sensory phenomena such as light, scent, and sound. These elements were not passive or aesthetic backdrops, but often described as co-facilitators in therapeutic moments, shaping insight, presence, or emotional regulation, which this chapter explores in more depth. NBPs also included indoor and virtual adaptations, such as the use of plants, imagery, nature metaphors, or objects made of natural materials. Some social workers encouraged clients to spend time outdoors between sessions, and others framed nature as a source of cultural knowledge or ethical grounding. Rather than reflecting a singular method or model, these practices revealed an evolving orientation within social work that centres relationship, place, and more-than-human co-presence. This chapter weaves the variety and complexity of NBPs as described by participants, attending closely to how social workers define, adapt, and enact these practices in relational, situated, and often resistant ways.

Narrative Findings: NBPs as Relational Praxis in Social Work

The following thematic findings from Phase 2 indicate that NBPs are not discrete interventions, but rather an evolving praxis grounded in mutuality, responsiveness, and interconnection. Social workers described co-creating healing encounters with clients, self, nature, animals, and land in ways that both resisted and were subject to dominant frameworks of individualism, control, and human exceptionalism. What emerges is a complex orientation rooted in ethical relation, pointing toward future directions that require movement away from anthropocentric and extractive systems and toward eco-social and liberatory ways of knowing, being, and relating.

Theme 1: Relating with Clients Through Co-Creation and Co-Navigation

The first theme highlights how participants described NBPs not as techniques delivered to clients but as practices co-constructed in relationship. Although Phase 1 identified walking therapy, gardening, and animal-assisted interventions as common NBPs, interviews revealed that these activities rarely functioned as fixed methods. Instead, they were negotiated in real time, shaped by client capacity, cultural context, and place. Co-creation here was not only about tailoring activities but about enacting situated relational ethics that resist prescriptive models and predetermined outcomes. What becomes visible is a relational orientation that privileges flexibility, consent, and shared agency, allowing clients to define their own relationships with nature. The two subthemes that follow map this process: first, through collaborative shaping of NBPs that attend to client safety and preference; and second, through co-navigation of access, risk, and the cultural meanings of nature in ways that sustain dignity and inclusion.

Co-Creating NBPs. Several participants shared stories about how their integration of nature was developed through collaborative negotiation with clients, particularly in contexts

involving illness, disability, or discomfort. These practices reflected a departure from standard models of social work practice, focusing instead on shared experimentation and understanding of complex needs. For example, Lisa described working with individuals living with chronic illness and disability, some of whom were unable to leave their homes. She shared, “Well, and it's funny because people will talk about even things like squirrels that they feed. So, you know, again, outside of our traditional kind of pets. It is these other little critters that are about.” Rather than treating a client’s inability to access the outdoors as a barrier to nature-based work, she described adapting her approach by incorporating animal relationships, natural imagery and sensory prompts. She expanded, sharing that sitting by a window generated opportunities for clients to explore emotion, connection, and grounding. In these instances, NBPs become a co-developed practice in relation to the client’s capacity and environment.

In some cases, co-creation meant transforming potentially tense or unsafe encounters into opportunities for shared activity in natural spaces. Recalling his early work in child protection, Joseph described how an initially tense and even dangerous home visit transformed after he learned from the children about their love of bike riding:

JOSEPH: My first job as a social worker was in child protection...I had to go to this house, which is about a half hour from here, and it was a report of a kid at school saying that he was afraid to go home...So I had to go out and interview everybody...So I get there to go do my interview and then, you know...thought things were going well. And then Dad got up, left the room for a minute, came back with a shotgun and said, “Get the fuck out of my house right now.” ... So, the next day, I had to go back and follow up. And the kids, when I was interviewing the kids, they were telling me all about what they like to do, and they liked to go for bike rides. So I threw my bike in the back of my

pickup truck, and when I went there, I said to the dad... “Hey, your kids are telling me they like bike riding. Do you mind if I go for a ride with them?” He's like. “Ok.” So, these kids took me on a ride through all the back trails of the areas that they liked, and they told me everything. Like any and every question that I had, they answered, No problem, right? Like when you do play therapy with kids, you get them playing, and they'll just talk. So, I took these kids... for a good hour-long bike ride and everything, so I come back, and dad's working in the garage, and the kids ran in the house. And I walk up to go talk to dad, and he looked at me and he started crying right away. And he said, “Joseph, I am so sorry for what I did. I had no idea you were going to be this kind of person that you, you took my fucking kids for a bike ride.” and cried...he just felt so bad about it. I was, like, “Yeah. I'm not here to ruin your guys(es) lives,” right? So that's actually the first time I actually took people out into nature in my practice, which was really early in my career.

Here, nature was not a pre-planned setting but emerged through the children's own preferences, illustrating how client-led choices can influence relational dynamics and foster connection. By engaging with them in spaces they valued and felt comfortable in, Joseph shifted the dynamic from investigative to relational, fostering trust not only with the children but also with their father.

Like Joseph's experience, James's approach described below demonstrates that NBPs need not involve immersion in expansive green spaces; what matters is aligning the form and pace of engagement with the client's comfort, capacity, and consent. James elaborated by sharing an example of working with youth experiencing complex medical and mental health needs:

JAMES: So my piece is to every meeting: rain or shine, get him out, and we do a walkabout and help him connect with the other part of the world, which he is not familiar. So that's, um, that I think is worth everything. Because on one level, if he doesn't get physically active. Um, his medical problems compound and his depression deepens. But it needs to be done safely and slowly because guess what? Emotionally, he gets spooked by the sound of birds. He's not agoraphobic, by the way. And medically, he needs to rest every so often. And, um. So it's all those things, which are, which are vital. So he is the youth that I do this with regularly, and it's the counter to the pandemic, where he was again. They were already homebound, but the pandemic just cemented the problems for him and his family. But it's working. So my commitment to him and to the family is to keep moving ahead. So an answer to, you know, or a colleague who might like to do forest bathing. Well, some of their clients may be ready to do forest bathing; by and large, this client isn't. And may never be, so we, we have to all of us need to work our ideals and our views into a treatment plan with each of our individuals, and how it looks can be very different. And we have to be patient with each other.

In this story, James observed that immersion in outdoor settings was not always practical or appropriate. Instead, he described a relational process in which nature was introduced gradually, with the client's consent and curiosity guiding the way. His focus was not on exposure but on mutual comfort and co-regulation, shaped by an evolving therapeutic relationship with his client.

Faye and Susan emphasized the role of client feedback and agency in shaping NBPs. Faye described how some clients opened up more readily in parks or gardens, and others felt exposed or anxious in open spaces. Although deeply valuing the impact of outdoor sessions, she described following clients' cues to decide where and how to meet, including outdoors or in an

office setting. Similarly, Susan shared that although natural spaces offer opportunities, some clients prefer the containment of “four walls” or feel safer indoors. For one client, she shared that outdoor sessions “didn’t allow them to go as deep as they would like,” prompting Susan to return sessions indoors. These moments were not considered failures to include nature; instead, they demonstrated evidence of ethical attunement, where social workers allowed practice to be reconfigured in real-time.

Taken together, these examples illustrate that co-creation of NBPs is not a one-time agreement, but a dynamic, ongoing process. NBPs are shaped by the relationship between social workers and clients in the moment, influenced by factors such as weather, need, mood, risk, and shared meaning-making. Rather than strictly “using” nature, social workers described engaging in collaborative adaptation, where spaces become part of the relationships, not simply a container for them. Across these accounts, NBPs emerge not as static techniques but as negotiated encounters that evolve with the relationship.

Co-Navigating Access, Risk, and Safety. Co-creation often led directly to shared decision-making around how, when, and where NBPs could take place, requiring social workers to navigate access, risk, and safety alongside clients. These relational negotiations were shaped by awareness of vulnerability and power, both within the therapeutic relationships and across social contexts. Several participants described how NBPs, such as walking side by side, sitting by a lake, or hiking, shifted traditional hierarchical roles toward more collaborative, client-led approaches. Lisa highlighted how fostering shared expertise in natural settings can strengthen therapeutic relationships, and Susan emphasized the importance of empowering clients by allowing them to shape their outdoor sessions. Tracy and Susan considered how the role of client-guided sessions in outdoor spaces might support social workers in recognizing the value of

client knowledge and place-based expertise. For example, Susan described how she tailors hikes to clients' capacities and incorporates discussions about nature's role in therapy during intake, "I'll say, what fits for you today? And they'll pick where they wanna go... and I follow." Such practices centre autonomy by inviting clients to actively shape the therapeutic landscape, selecting locations that hold personal meaning and contributing to more dynamic, participatory healing experiences.

Accessibility considerations were also central to how participants respected autonomy and safety in NBPs. Ruth shared how she has to navigate her mobility challenges, which she addresses in her day-to-day life through a walker, limiting her ability to engage in NBPs with clients. Paved pathways in park spaces are what she finds most accessible. In reflecting on the needs of her particular social work focus with children, Olivia spoke about challenges when accessing nature through trails with her clients, such as requiring access to bathrooms. These reflections highlight how adapting practices to physical realities is essential for ensuring that NBPs remain inclusive and client-centred. For some, like Tracy, this meant collaboratively managing sensory or environmental triggers that could otherwise limit participation in outdoor practice. She shared examples of working with clients experiencing complex phobias and mental health symptoms where temperature deregulation can be triggering. Through shared reflection, she described the process of co-navigating sensory discomfort through exposure therapy, using nature not only as a healing space but also as an opportunity to explore emotional and somatic insights.

Honouring choice also meant attending to differences in how clients relate to nature, shaped by geography, privilege, and cultural identity. In urban settings, access could be limited

by transportation or cost, while in rural areas, green space was ever-present. Maya spoke about how perceptions of belonging in “wilderness” spaces are shaped by privilege:

MAYA: A lot of people just can't get to trails, right? You don't have a car; you feel like you don't have the right equipment. And so there's this whole idea of what, again, this privileged perspective of like nature is for those who have kayaks and hiking boots and equipment and like blah blah blah. Right? And like, you feel like you can't take space in these places or that you don't belong.

Similarly, participants pointed out how racialization shaped their own and their clients' experiences of nature, at times fostering connection, and at others evoking alienation or surveillance. For example, Maya recalled being told, “You know, you're brown, right?” in a way that generated feelings of not belonging when spending time outdoors as a child, and Haider reflected on being socialized as a first-generation Canadian to “be the good minority” with “no room for nature” in his family's settlement experience. Both linked these experiences to broader critiques of Whiteness in environmental movements and the ways access is policed through racialized norms. Although the survey highlighted outdoor activities as the most common NBP, these narratives complicate the assumption of equal access by surfacing how privilege, racialization, and gender shape experiences of belonging in natural spaces.

Gender also shaped participation. Emily observed that some men framed outdoor activities in terms of accomplishment, such as hunting or fishing. She incorporated sensory interventions, such as lavender pillows, to foster emotional regulation and challenge traditional gender norms. Haider and Olivia reflected on their own privileges and intersecting identities, identifying NBPs as opportunities to support marginalized communities, such as trans and non-binary clients. Haider, reflecting on his experience as a male social worker, described his efforts

to challenge his privilege and power while observing the disproportionate impact of environmental harm on cis and trans women. He noted his belief that women connect more easily with nature and expressed his desire to learn from them in order to resist patriarchal hierarchies that exploit the natural world. These reflections align with intersectional ecofeminist critiques that environmental spaces are not neutral but structured by power and identity.

Together, these subthemes and the narratives within suggest that the NBPs identified in Phase 1, most often described as walking therapy, gardening, or animal-assisted interventions, may gain their meaning and impact through processes of co-creation that honour client agency, safety, and cultural context. Rather than fixed activities applied to clients, NBPs unfold through mutual adaptation between the social worker, the client, and the non-human world, shaped by intersectional realities in which practice occurs. From an intersectional ecofeminist perspective, these dynamics highlight how race, gender, class, disability, and colonial location interact to structure access, belonging, and meaning in NBPs. The political, economic, cultural, and social positionality of clients, workers, and species play significant roles in how these practices are taken up, experienced, and sustained. This orientation resists standardized models and opens space for nature to enter practice in ways that are relational, flexible, and context-specific. In the next theme, I delve further into how these collaborations consider the more-than-human world in relation to humans and the therapeutic process.

Theme 2: Relating With the More-Than-Human World

Phase 1 survey responses predominantly framed NBPs in terms of human benefit, but the narratives in this theme reveal moments where nature itself was experienced as a collaborator, shaping therapeutic process and meaning-making. Many of the participants' narratives disrupted portrayals of nature as a passive backdrop, instead describing encounters where animals, plants,

weather, and place co-shaped meaning, presence, and healing. These accounts reframe nature not simply as a tool to be used, but as a relational partner with agency, history, and capacity to influence human experience. In this sense, working “with” nature was as much about noticing and responding to its cues as it was about guiding client engagement. Such perspectives resist anthropocentric frameworks identified in the literature, moving toward eco-centric and trans-species ethics rooted in CAS and intersectional ecofeminism. The two subthemes that follow explore these more-than-human relationships: first, how nature is experienced as a relational partner in practice; and second, how participants navigated the complexity and disruption that can accompany such relationships.

Nature as Relational Partner. Nature was not simply treated as a tool or setting for most interview participants, complicating the survey findings. Experiences were described in which natural elements were perceived as present, responsive, or relational. In the context of practice, nature was described as shaping or influencing therapeutic insights through co-regulation, resonance, and shared noticing. Ashley shared an example of this in practice:

ASHLEY: So I had a teacher one time who came, and she was just beside herself because Covid had just started. And she said to me, ‘I just don't want to run with the pack, I'm just not that person,’ And all of a sudden, do you know what a murmuration is? Murmuration is usually attributed to starlings, and there are en masse, hundreds of starlings-and so, I don't think it was Starling's because there are other birds that flock together But, all of a sudden, as soon as she said that, this whole flock just started weaving around and I felt that was to me, that meant that we were in sync outside in nature. That nature was showing us that sometimes you are with the flock, and sometimes you do have to spend some time away.

Here, the presence of the birds served as both a metaphor and an embodied connection, expanding the therapeutic space beyond mere human dialogue. Ashley and her client experienced the birds not just as scenery but as catalysts for embodied connection and shared meaning. The work occurred *with* nature, not merely in its presence.

Another example of incorporating nature as a relational partner through metaphor, both verbally and visually, was shared by Alex, along with their artifact (see Figure 1), expanding on how they have used the small stream beside their office parking lot:

Figure 1

Artifact Shared by Alex



ALEX: So in this little stream, there's a part that's really, really rocky, like people have thrown out old concrete bricks and all sorts of stuff, and the water is turbulent, and it looks like it's moving fast. And then right after that, you know, four steps, it's not even a huge distance, it's deeper. There isn't as much debris. It's flowing smoother, and we talk about how that water is all the same, right? And that those turbulent points will slow down if we let them. But if we keep piling in, or we keep whatever it is that's floating on that water in that spot, then we just keep doing it over and over again.

In this example, the stream functioned not just as a metaphor but as a shared lens of understanding through which nature carries knowledge. The client's emotional landscapes are mirrored and made communicable through metaphor and connection. In this example, the natural world becomes part of the therapeutic relationship, as its movement and imagery invite reflection and offer language through which meaning emerges.

Companion animals were also central to how some social workers built rapport and deepened understanding. Olivia described how discussing animals helped her connect with students during remote pandemic work, and Lisa shared how including questions about animal relationships improved assessment processes in a hospital setting:

LISA: I was just speaking with a man on dialysis. He's probably been on dialysis for about a year, and his wife recently died, and he said the thing that's getting him through this is his cat, and his—so he lives in a retirement home. And he said his cat not only gives him joy and provides a kind of comfort, but (also) to other people who live next to him. So again, it was just that reminder to me that there's such an important piece that sometimes, I think I forget to tap into, and that I'm not sure that all social workers are kind of tapping into as well, and it is such a quick and easy question, you know, 'do you have any companion animals?'

Although Phase 1 indicated that animal-assisted interventions were among the most common NBPs, these accounts reveal how their significance extends beyond instrumental use, shaping belonging, emotional resilience, and community connection in ways that challenge the marginalization of animal-human relationships within social work.

Rather than viewing weather as a barrier to therapeutic practice, several participants framed it as an active presence in the healing process. Both Amin and Tracy spoke about

intentionally spending time with clients outdoors in a variety of weather conditions, such as wind, rain, or snow, as a form of mindfulness in itself. Tracy shared the following example, illustrating how she integrated the sensory qualities of weather in a mindfulness session:

TRACY: I've got a client coming at 9 in the morning and we're meeting in the forest, and I'd texted her at 8 o'clock, and I said, "it's a light rain, and I actually love, I'd prefer, I actually like being in light rain, if you're willing to meet me, I'll still meet you, there, otherwise we can zoom, if don't like being wet." She went, "I'll meet ya!" So we went, and you know, once you get under the tree cover. The rain doesn't hit you that hard; it just trickles through. It was only in the parking lot we got wet. But walking through the forest, we were pretty dry. And at one point, we chose not to be, because we were doing mindfulness practice. You know, we're doing, you know, tapping into all our senses, dialling into all our senses, and we dialled in, with the rain, we could smell. So, it's just creating, smell, tuning your sense of smell, so just breathe and smell, tuning your senses to smell the rain. Tuning into our sense of sound, we could hear the rain; tune into your sense of feeling, feel the rain on the skin. Like it accessed sensually, the mindfulness practice we were in, in such a way you could never get in an office, right?

In this narrative, Tracy demonstrated how the rain became more than just an environmental context; it was a co-regulator and sensory collaborator. The rain provided texture, sound, scent, and touch, drawing the client and social worker deeper into embodied presence. This example highlights how some participants in the study recognized nature as a relational participant in meaning-making and shaping therapeutic experiences, particularly through sensory and affective engagement that they believed could not be replicated in traditional office-based settings or therapeutic approaches.

Some participants reflected on nature as an interconnected and communal force. Lisa expressed awe at how trees communicate and how whales grieve, underscoring the vastness of what remains unknown about non-human intelligence. Such perspectives align with ecofeminist and CAS approaches, which challenge anthropocentric assumptions by recognizing the agency and knowledge of more-than-human worlds. Maya similarly emphasized the interconnectedness of nature while also naming how colonization has severed many communities and cultures from these relationships through land dispossession and the loss of traditional knowledge sharing, “We don’t value the communication that happens between plants, animals, and fungi. But learning about these connections can help people find grounding and belonging. Especially those disconnected from their communities or families.” Maya’s perspective reframes NBPs as not solely about human connection but about honouring the wisdom and interdependence of all living beings.

For some participants, their nature connections carried spiritual or ethical significance, signalling that more-than-human relationships can hold importance beyond their immediate therapeutic value. Ashley reflected on moments when clients experienced healing through place in ways that felt ineffable and “very spiritual,” while also describing animals such as hummingbirds as “good medicine.” At the same time, she acknowledged that spirituality and intuition are often dismissed in mainstream social work as “woo woo,” even as clients experienced them as essential to practice. James connected his eco-centred practice to his Christian faith, reframing dominion as responsibility and care for non-human life, aligning his beliefs with anti-anthropocentric values. These accounts suggest that for some workers and clients, NBPs were not only relational but also sacred, extending the meaning of partnership with nature into spiritual and faith-based dimensions.

Complexity and Disruption in Nature Relationships. Although the survey largely reflected positive valuations of nature, interviews surfaced more complex and at times contradictory accounts, complicating romanticized assumptions of “connection to nature.” Several participants resisted the notion that nature is universally soothing or desirable. Ruth, for example, openly reflected on her dislike of being outdoors, except in gardens: “I’m Canadian, we’re supposed to love being outside, and I hate it, so, yeah.” She described herself as not one of those “rugged outdoor types,” preferring cultivated environments and windows. Others joked about not wanting to be associated with the “Mountain Equipment Co-op backpack” aesthetic. These reflections highlight how cultural archetypes of the “nature person,” often tied to Whiteness, class privilege, fitness, and ecological moralism, shape experiences of belonging and exclusion. By resisting or reinterpreting these dominant scripts, participants reframed connection as something intentional and situated rather than automatic or universal. Relationships with nature were also marked by embodied contradictions. Maya, for instance, shared:

MAYA: But I always found space and solace being in the natural world and being connected to it, which is really funny because I'm super allergic to being outside. I have a million environmental allergies. So, it's like, actually, this is really weird, funny relationship.

Maya’s account illustrates how connection does not require ideal conditions, but can persist through contradiction, ambivalence, and adaptation. Rather than treating limitations as barriers, these narratives reframe embodied difference as part of the complex ways people negotiate their relationships with nature.

Finally, participants emphasized tensions between inclusion and ecological protection. Haider reflected on returning to a hiking trail in Bruce Peninsula National Park years after it had

been paved for wheelchair access. Others criticized the change as harmful to the environment, but he interpreted it differently:

HAIDER: Up in the Bruce Peninsula National Park up there in Tobermory. I've done that hike a few times, and it was rocky and this and that, and I was with somebody who, years later, (said) that they paved everything. And that person was very offended that they paved this, and I remember just, it was wide, it was for people who have to use wheelchairs. And I just remember going, you know, if we're going to claim inclusion, and if we're going to claim respect, and then we need to do the best that we can, so does it destroy nature? Well, doesn't really have to. We live in a whitewashed colonial kind of world anyway, and it's horrible. But at the same time, if we're gonna, if we're gonna and play inclusion as well, then we need to, we need to be able to make things a little more accessible.

Haider's account underscored how inclusion and ecological protection are often framed as mutually exclusive, when in fact they may be negotiated together, particularly when viewed through the lens of colonial histories that have long restricted who is allowed to belong in natural spaces.

Finally, Olivia anchored her reflections in the systemic tensions of practicing social work in a mining town. She described the contradictions of acknowledging ecological interdependence while confronting local dependence on resource extraction:

OLIVIA: I guess my hope is being able to move from a hierarchal view of humans and nature, acknowledge that inter-dependence. You know that the human world needs the natural world. Like you can't divide the two and you can't conquer, you know, try to conquer nature and make it submit to your wish and to your will. And I guess that also,

like, includes, you know, changes in our whole system. Right? Like capitalism, I'm in a mining town, right? You're talking about the hierarchy between, you know, we're taking so many resources, but without that, what is our local economy? So, it means, like the whole system really has to, it has to change. And I think that some advocacy on that piece would be important, and I think that advocacy on that piece would also potentially create some solidarity between social workers and Indigenous communities that are fighting to protect water and land. So that we could add our voices to theirs, not to be louder than them, but the lift to make their voices louder, use the agency that we have in the organizations that we have.

For Olivia, such contradictions demanded not only personal or local adaptations but structural transformation. She connected her practice to broader struggles against capitalism and colonialism, envisioning solidarity with Indigenous communities resisting dispossession. Her account illustrates how engagement in NBPs cannot be disentangled from the economic and colonial conditions in which they are practiced, underscoring the need to link relational work with systemic advocacy.

Together, these narratives reveal that relationships with nature are rarely straightforward. They are shaped by culture, identity, embodiment, accessibility, and political economy. In this sense, the predominance of White participants and able-bodied individuals in the study, and social work broadly, requires careful interpretation. Phase 1 survey data framed NBPs in largely anthropocentric terms, but these stories illustrate a more nuanced terrain where nature emerges as both collaborator and disruptor, and a site of contested meaning. Such reflections complicate binaries between inclusion and exclusion, comfort and discomfort, or ecological care and economic survival, signalling the importance of context-specific, anti-anthropocentric ethics of

practice. In the next theme, I explore how these relational orientations extend beyond individual experiences to confront institutional constraints, reimagine professional boundaries, and open new possibilities for resisting dominant systems that limit care, connection, and ecological belonging.

Theme 3: Relational Resistance: Challenging Systems Through Reclamation and Responsibility

If NBPs can be understood as a relational praxis grounded in ethical interconnection, they must also be read as practices with systemic and political implications. Participants' narratives suggested that working with nature often placed them in tension with the dominant frameworks that shape social work, such as regulatory frameworks, professional codes, institutional spaces, and settler-colonial legacies. Although the Phase 1 survey only hinted at these barriers through concerns about liability, policy, and training gaps, the interviews made visible how social workers encounter, negotiate, and sometimes refuse these constraints. In this sense, NBPs were described not only as therapeutic or relational practices but as acts of resistance that seek to reclaim space, knowledge, and responsibility within broader struggles for justice. The two subthemes that follow explore how this resistance unfolded: first, by unsettling institutional norms and professional boundaries, and second, by reconnecting with land, ancestry, and cultural traditions.

Challenging Institutional Norms and Professional Boundaries. At the level of everyday practice, participants frequently encountered structural barriers associated with professionalism, such as bounded offices, rigid definitions of safety, and standardized procedures that limited the scope and context of social work. Choosing to walk with clients, meet in gardens, or incorporate land-based rituals was therefore more than an alternative technique: for some, it

was a deliberate disruption of bureaucratic norms. Ruth illustrated this tension in her description of adapting her facility's gardens (see Figure 2) for clients with dementia, balancing risk management with continued access to nature:

Figure 2

Artifact Shared by Ruth



RUTH: When I first started there, we didn't have that high fence; we had a thicket, about four feet with prickly bushes. With, and a low picket fence because that usually was enough to deter people from leaving. Became less of an issue, became less of a deterrent, as our clients got a bit younger. And we got more people, and we saw people later in the disease. So we've had to make modifications...what I sent you was a picture of the most recent modification I think it was about 12 years ago or so, we had to make the fence high. It's about an eight foot fence, again, so privacy. And it was also to provide the clients with more privacy, but also there's a lot of busy activity on the street. So, we did that, and it still didn't deter some people because we're, well, I remember, Eddy, who was 84? No. He was 94 at the time he got up over that fence. Because people with dementia sometimes want to go, right? They want to go...but that's part of the disease, so, you

know, the garden had to be adapted for that, and you'll notice there are raised beds so that people can interact with the beds.

Rather than removing opportunities for engagement, Ruth advocated for these modifications that enabled clients to remain connected to the outdoors, resisting institutional tendencies to minimize risk through restriction. Her story echoes survey responses in which safety concerns were cited as reasons to limit or avoid NBPs; yet, here, safety was redefined to sustain rather than foreclose relational connection with the land.

For some participants, NBPs were not only about expanding where practice occurred but also about reconfiguring the distribution of power within therapeutic relationships. Faye contrasted office-based sessions, where she remained “in charge of the space,” with outdoor meetings that shared vulnerability between worker and client. In public or natural spaces, she noted, authority was less easily asserted, and safety became something navigated together. Tracy similarly reflected on how institutional settings reinforced domination and submission, whereas meeting outside dismantled these hierarchies. She emphasized how her own choices, eschewing formal dress, professional materials, and controlled environments, fostered greater relational equality. These accounts reveal NBPs as a means of unsettling professional authority, shifting power toward more collaborative, responsive, and accountable relationships.

The COVID-19 pandemic further reconfigured dynamics by shifting dominant definitions of safety, creating openings to legitimize and expand NBPs in ways that had previously been constrained. Practices once viewed as unconventional, such as meeting outdoors, became viable and, in some cases, necessary for maintaining therapeutic relationships. Ashley described porch sessions as something she “stumbled onto,” and James reframed the pandemic as a “wake-up call” to embed eco-justice in his practice. Amin emphasized how increased isolation prompted

him to encourage year-round engagement in activities such as walking, swimming, and gardening as remedies to disconnection. Alex reflected on how cultural practices, such as smudging, which had long been considered “unsafe” by institutional standards, gained legitimacy when re-situated outdoors. These accounts highlighted how moments of institutional disruption could catalyze shifts in practice, legitimizing NBPs as forms of care rather than exceptions to it.

Collectively, these narratives illustrate how NBPs function as acts of relational resistance, challenging dominant constructions of safety, professionalism, and therapeutic authority. Participants’ stories show how social workers subtly disrupt institutional approaches to care by redefining risk, expanding legitimacy, and redistributing power in practice. In this way, NBPs are more than therapeutic adaptations: They are interventions that contest how care is structured and where it is allowed to take place. These everyday acts of refusal and reclamation lay the groundwork for the next theme, which turns to how social workers reclaim land, culture, and ancestry as central to their relational praxis.

Reclaiming Relationship to Land, Culture, and Ancestry. The everyday disruptions of systemic and institutional barriers are connected to broader efforts at reclaiming relationships, as several participants reflected on how their practice with clients and communities deepened commitments to land, culture, and ancestry. Maya and Lisa considered NBPs as ethical commitments to the Land Back movement, Indigenous sovereignty, and anticolonial social work. Both linked settler colonialism to activism and advocacy in social work, emphasizing that integrating nature into practice requires an ongoing reckoning with whose land is being accessed, under what terms, and by whom. Although Phase 1 survey data rarely addressed Indigenous sovereignty directly, these narratives surface the political and ethical dimensions that remain

largely invisible in quantitative accounts. Participants' reflections foregrounded the responsibilities of settlers, and particularly White social workers, in resisting extractive practices and confronting privilege within environmental and social justice movements. Maya explicitly connected social work to supporting Indigenous land defenders and highlighted the violence they face:

MAYA: What is appropriate and inappropriate activism in a sense, like, Indigenous people are protecting their land. Protecting it, not just for themselves, but for future generations, for everybody, and like the resistance and just so much that, they have to go through that. It's just unreal. Like if that was a group of, like, people protecting the environment, do you think that would have happened? No, you know what I mean? They would not have rubber bullets shot at them.

Maya's reflection underscored how interlocking systems of oppression, including racism, colonialism, and environmental injustice, continue to marginalize Indigenous communities, and positions land defence as inseparable from social work's ethical commitments. Lisa shared a similar duality in her desire to learn from Indigenous healing practices while also expressing concern about settler overreach and a commitment to resisting colonial histories of extraction and appropriation.

Descriptions of the integration of Indigenous knowledge and reciprocity were shared across several interview stories, with Joseph offering a particularly rich example. For him, reciprocity was deeply connected to Indigenous teachings about consuming animals and honouring their lives. He recounted a practice from his time in the north, where he laid the bones of a ptarmigan at the base of a tree in gratitude as an act that reflected his understanding of healing as a cyclical, relational process. He also shared a Diné cultural teaching shared with him,

which involves laying a placenta at the foot of a tree after birth, allowing a spirit animal to consume it and thereby establishing a lasting connection between the child, the animal, and the land. These teachings, grounded in cycles of giving and receiving, shaped Joseph's understanding of humans, animals, and nature as interconnected. The artifacts he shared, including a birchbark basket gifted to him by Indigenous clients (see Figure 3) and created through traditional practices, further reflected his respect for Indigenous knowledge systems:

Figure 3

Artifact Shared by Joseph



By situating healing within cycles of reciprocity and gift exchange, Joseph's accounts resist extractive relationships with the land and affirm Indigenous ways of knowing as central to his social work practice.

These accounts of Indigenous teachings in the Canadian context were echoed in stories that located colonization and land-based disconnection within a global frame. Amin, Tracy, and Maya all shared stories of nature meanings in relation to colonization within and beyond Canada's settler-colonial reality. Amin emphasized the harm caused by colonial policies in his country of origin, such as restrictions on forest access, which disrupted food sovereignty and ancestral knowledge that are deeply implicated in nature-relationships. As he explained,

AMIN: I think good percentage of work in the global south, in the developing economies is tied to nature, access to water, access to food, access to land. It is an important factor, and it's not much of a like, you know, it's not as much of a practice here in the Western world. Because in the West, it's about temporal. There's resolution of problems. Like, what we do right now is solution-focused, immediate release, what can be done, but not addressed those fundamental, deep, like fundamental reasons, which is affecting them, like you don't think, although we talk about anti-oppressive practice, saying. But then, unless you address issues that you are questioning, which is nature, access to water, health, access to land. That's where the, the change in communities and our generational shift happens. Where in our communities in perpetual subjugation. Well, not woken open up, they're always awake. But are liberated.

Amin's understanding here connected directly to why the inclusion of nature was relevant to his social work practice and the centring of communities. In this framing, access to land, water, and food sovereignty are not peripheral to social work; rather, they are foundational conditions for community survival and liberation. He went on to describe how colonization disrupted traditional food knowledges and medicinal practices in India, leading to severed relationships with land and culture. Maya and Camille shared similar perspectives based on their experiences working with Indigenous communities overseas. Camille reflected on learning about bush therapy through Māori communities in New Zealand, and Maya drew on her time in the Ecuadorian highlands, where ancestral knowledge of food, grains, plants, ice, and animals formed a foundation for community identity and resilience. Maya identified this interconnectedness of land, culture, and knowledge as similar to that of Indigenous communities in Ontario. Across these accounts, participants framed NBPs not as a return to a romanticized

wilderness, but as a return to relationships that are cultural, embodied, and political, and that challenge the ongoing impacts of colonialism on land, knowledge, and community.

Together, the narratives in this theme position NBPs as relational acts of resistance that operate at multiple levels, from everyday adaptations that challenge institutional definitions of safety and professionalism to deeper commitments that reclaim relationships with land, culture, and ancestry. Although Phase 1 survey data captured only fragments of these dynamics in open-ended responses, Phase 2 revealed how systemic barriers, settler-colonial histories, and ecological responsibilities were negotiated in practice. In both resisting institutional norms and aligning with land-based and Indigenous knowledges, participants framed NBPs not as optional enhancements to social work but as ethical and political commitments that challenge extractive models of care. These practices extend relational ethics beyond the client–worker relationship to encompass communities, ecosystems, and future generations, laying the groundwork for the transformative orientations explored in the final theme.

Theme 4: Relational Futures—Toward a Liberatory, Eco-Social Praxis

If the previous theme has shown how social workers relate within and against systems of power, this final theme turns to what might come next. Participants envisioned NBPs not only as present-moment interventions, but as openings to alternative futures rooted in care for the Earth, intergenerational responsibility, and a reimagined profession. These futures are not utopian. They are grounded in ecological crisis, settler colonialism, and systemic injustice, but also in possibility. Through their narratives, participants positioned NBPs as a catalyst for rethinking the foundations of social work: What care means, whom it includes, and how it is practiced. They called for an expansion of care beyond individual clients to ecosystems, interconnected communities, and future generations. They also emphasized the urgent need to restructure

education, ethics, and knowledge systems, warning against shallow or commodified integrations of nature that fail to challenge extractive systems. Phase 1 survey responses primarily described NBPs in terms of immediate client benefit, but these narratives expand that frame toward systemic and intergenerational commitments. The next two subthemes highlight this call for transformation. First, participants described the need to expand the frame of care through relational eco-social praxis. Second, they reflected on how education and professional ethics must evolve to meet the ecological and ontological demands of our time.

Expanding the Frame of Care. Across interviews, participants emphasized the need for social work to move beyond the individualizing frameworks that have long defined the profession. Healing, in their accounts, was not simply an outcome to be achieved but a way of living in relationship with others, land, and the more-than-human world. James and Olivia both challenged the limits of the PIE paradigm, noting that it remains anthropocentric, treating nature as a backdrop rather than a relation. Olivia envisioned eco-social frameworks that centre interdependence and solidarity with Indigenous land and water protectors, urging social workers to use their agency not to speak over but to amplify Indigenous voices. Camille extended this critique by linking planetary health directly to mental health, arguing that helping clients cope is insufficient without confronting the systemic conditions, such as climate change, inequality, and alienation, that produce harm. These reflections foreground NBPs not as add-ons to clinical practice but as openings toward a relational, justice-oriented redefinition of care.

Participants further reflected on how outdoor practices altered the quality of therapeutic conversations. Faye and Susan observed that children and youth often spoke more authentically outdoors, freed from the scripts and constraints of office environments. Faye recounted one such case:

FAYE: And I remember even, there's one young girl, who's, obviously, I talk to parents first to get some of the insight and story, in session? She said everything her mom had said, like word for word, I swear, in our office? She had said everything the exact same way as her mom. And I was like, "That's awesome," but I didn't—wasn't sure she knew what it all meant. And when we were finally able to leave that space, she began speaking more about, like, her friends at school and different things. And it came out that she was saying what she thought she needed to say in the session. Because that's what her mom had said to her. And when we were outside, I learned that a lot of those things were the mom's perception and that that wasn't really what was going on anymore. And so, we learned that she was actually being bullied at school. And she hadn't shared that with Mom. And so she wasn't just anxious. She wasn't anxious about school for no reason; she was getting bullied, and we were able to connect with the school and talk to them about that. Because when we were at the park, she was able to see other kids and be like, "I don't want to go play with other kids because I'm worried this will happen." We never would have had that conversation in my office because it's just myself and her. And the conversations always went the exact same way. Every week with no change, which is why we tried changing the environment. And the second we changed the environment, it opened her up to changing the way she was experiencing the situation with me. And it opened doors for her in that sense.

For Faye, the change in environment created new possibilities for authenticity, agency, and relational safety. Susan echoed this perspective, noting that clients' narratives often changed in outdoor settings because movement and sensory engagement created calmer nervous systems and more genuine dialogue. These stories illustrate how NBPs not only broaden the scope of

where care can occur but also transform what becomes possible within therapeutic relationships. Faye later connected this approach to an artifact she created from found natural materials, symbolizing the process of transformation she sees in practice: taking what appears broken or overlooked and creating something new. Together, these accounts position NBPs as more than an alternative modality. They enact a reconfiguration of care that is at once therapeutic, ecological, and relational, expanding the scope of social work beyond the individual to include land, community, and more-than-human collaborators.

This expanded frame also meant attending to the ecological realities that shape client well-being, including climate anxiety and environmental change. Lisa and Maya highlighted the growing relevance of these concerns in therapeutic contexts. Camille and Alex emphasized the need for systemic investment in nature-integrated care, particularly to address inequities in access to services. Participants also linked these shifts to the post-COVID reconfiguration of therapeutic space. Practices once seen as unconventional, such as porch visits, walking sessions, and outdoor ceremonies, have become viable alternatives to office-based care, and for many clients, they remained more comfortable or secure at the time of interviews. These adaptations reflected not just pragmatic flexibility but a transformation in how safety, accessibility, and therapeutic legitimacy were defined.

Reimagining Education, Ethics, and Epistemology. While participants described their own learning as deeply shaped by experience, land and community, they were also clear: current social work education is not preparing social workers to engage with ecological realities. Many reflected on the absence of environmental justice, Indigenous knowledge, and relational ethics in their training, calling for fundamental shifts in how future social workers are educated. For example, Haider offered a compelling narrative about outdoor pedagogy, drawing on his

experience as an educator, and shared how he believed that taking students outside transformed their understanding of power, space, and relationality. He described how outdoor learning prompted students to question classroom-based assumptions about productivity, expertise and control; and instead recognize humility, listening, and relational accountability as central to ethical practice. Despite institutional resistance, including concerns about liability and risk, he persisted, viewing outdoor learning exercises as an invaluable opportunity to strengthen a more interconnected frame of ethical awareness. This example aligns with Phase 1 respondents who described liability as a barrier; however, the interviews revealed how such constraints can be navigated in ways that deepen rather than diminish ethical learning.

Maya and Susan both advocated for curricula that centre climate justice, Indigenous sovereignty, and ecological interdependence. For Susan, this future vision also meant valuing embodied and cultural knowledge, including wisdom in berry-picking, plant medicine, and traditional foodways as legitimate sources of insight. She emphasized the importance of learning beyond books and professional development, including cultural humility and Indigenous practices, whether working with Indigenous clients or not. Maya's critique was rooted in her own trajectory from political science and international development into social work, where she found climate change and justice, central to her earlier work in communities, almost entirely absent from her formal social work education. She underscored the need to centre community and systems thinking in integrating nature into the curriculum, situating the environment as part of social inclusion and expanding social justice beyond individuals. Maya also reflected on her professional development experiences in environmental justice outside of social work, noting a persistent lack of diversity in those spaces:

MAYA: I used to do a lot of environmental conferences, and the lack of diversity in the room was astonishing to me. And again, it's like, is it that people didn't care? No, I think it's just people don't feel safe in those spaces, or they don't feel welcomed in those spaces, or they're not being considered in those spaces, like, you know what I mean?

Maya's call for diverse, anticolonial frameworks in eco-social work education echoed Camille's emphasis on teaching about nature, including forests and other outdoor spaces, through a critical lens, and on offering a continuum of approaches for those who may not want or be able to practice in this way.

Across these accounts, participants emphasized that integrating Indigenous knowledge into environmental and social work education requires both curricular change and pedagogical innovation. Both Haider and Maya emphasized the importance of integrating Indigenous knowledge, teaching, and advocacy into social work education on environmental issues, alongside the development of new assessments, an understanding of risk, and the design of interventions that incorporate nature. Ashley, Emily, and Susan reinforced the alignment between nature and Indigenous knowledge by engaging the parasympathetic and nervous systems, with Emily drawing parallels between eye-movement desensitization and reprocessing therapy and Pow Wow ceremonies, both of which are grounded in bilateral movement, rhythm, and song. These insights highlight the significance of epistemic curiosity in reassessing widely used therapeutic modalities. Faye added that social work communications courses must prepare students for outdoor and nontraditional settings, addressing confidentiality, side-by-side engagement, and group dynamics. Collectively, these perspectives challenge dominant education models that treat practice as bounded by walls, calling instead for a pedagogy that equips future

social workers to navigate ecological responsibility, cultural humility, and relational ethics in diverse environments.

Participants were also clear that new pedagogies must be matched with evolving ethical frameworks. New ways of practice require new understandings of ethical practice. Susan described how she navigates current standards of practice, creating plans for outdoor sessions that address confidentiality, safety, and client preferences. Confidentiality in public spaces, including encounters with animals or people, is treated as an ongoing conversation, aligning more closely with principles of informed consent in research. James and Alex described adjusted interventions to prioritize client comfort and safety while maintaining the benefits of NBPs. By tailoring practices to clients' physical and emotional needs, participants demonstrated how risk can be managed without compromising therapeutic goals or safety.

Several participants warned against the rising commodification of NBPs. Tracy and Ashley expressed concerns that NBPs risk being reduced to techniques, stripped of context, history, or relational depth. Tracy emphasized the need to cultivate “ethics of relationship, not replication.” In her view, NBPs must be rooted in ongoing commitments to land, community, and justice, rather than being marketed as wellness trends or professional add-ons. Lisa expressed concerns about commercializing outdoor practices driven by climate anxiety, emphasizing the importance of implementing them ethically. Ultimately, participants envisioned a future in which social work is reoriented around humility, reciprocity, and ecological responsibility. Camille envisioned a broader shift in mental health approaches, where NBPs help move beyond problem-centred models toward more holistic, nature-embedded understandings of well-being and community care. These perspectives call for an epistemology that honours non-Western, more-than-human, and land-based ways of knowing. In doing so, a fundamental

question is asked: Not just how can nature be included in social work, but how must social work transform in knowledge, practice, and ethics in order to belong to the Earth?

Together, these reflections on care, education, and epistemology illuminate the transformative potential of NBPs within social work as a relational, liberatory praxis. Phase 1 offered only glimpses of these possibilities, and Phase 2 revealed them as central to participants' visions for the profession's future. Rather than simply expanding the scope of existing frameworks, the findings call for a fundamental reimagining of social work that embraces eco-social responsibility, centres Indigenous and ancestral knowledges, and resists the pull of commodification. Participants' stories suggest that NBPs are not simply peripheral but possibly essential to the future of the profession: a future rooted not in extraction or control, but in interdependence, ethical relations, and collective survival.

Conclusion

Collectively, the survey and narrative interview findings offer a deeper understanding of how Ontario social workers understand, value, and implement NBPs in their work. Phase 1 survey data established that NBPs are already in use, most often in the form of outdoor activities such as walking, gardening, and animal-assisted interventions. These practices were largely framed in terms of benefits to human clients. Although participants generally expressed some anti-anthropocentric beliefs on the NEP Scale, these were not strongly correlated with NBP engagement, suggesting that other factors, such as opportunity, accessibility, and workplace culture, may be more influential than ecological world view alone. The survey also indicated low reported engagement with climate justice advocacy and no engagement with farming, highlighting gaps between eco-social aspirations and actual practices.

The narrative analysis in Phase 2 deepened and complicated these patterns. What appeared in survey responses as a discrete “activity type” often emerged in interviews as a complex, adaptive process shaped by relational ethics, client agency, and responsiveness to place. Narratives also move beyond the anthropocentric framing suggested by many Phase 1 responses, describing nature not only as a tool for human well-being but also as a relational partner with its own forms of agency and intention, even if these remain beyond human understanding. The use of relational language conveys participants’ felt reciprocity with the more-than-human world while acknowledging the limits of human narration. This shift from nature as backdrop to nature as collaborator aligns with the theoretical commitments of CAS and intersectional ecofeminism, even when survey responses did not explicitly reflect these perspectives. The interviews further revealed that NBPs can serve as acts of relational resistance, challenging institutional norms, professional boundaries, and colonial frameworks that restrict how and where social work is practiced. This dimension was largely invisible in the survey data, where structural barriers were mentioned only in open-ended responses and not measured quantitatively. Finally, participants articulated future directions for NBPs that extend the scope of care beyond individual clients to ecosystems, communities, and future generations, calling for shifts in education, ethics, and epistemology to meet ecological realities. These visions spoke directly to the study’s second and third research questions, highlighting both the transformative potential and the risks of co-optation inherent in integrating nature into social work.

Across both phases, a tentative response to the first research question, “How are Ontario social workers engaging in nature-based practices (NBPs) with clients?” is that NBPs are diverse, situated, and often co-created with clients in real-time. In response to the second question, “What do they know and believe about nature and the environment in connection to

their practice?” the findings suggest a spectrum from utilitarian to relational-ecological, with some participants moving toward anti-anthropocentric and trans-species ethics, despite workplace and systemic constraints. For the third question, “What are possible future directions for practice, education, and research?” both phases indicate opportunities to embed ecological and decolonial perspectives in curricula, codes of ethics, and institutional policies, while addressing barriers that limit critical, justice-oriented NBPs. This integrated analysis highlights the value of a mixed methods approach: Phase 1 provided a quantitative understanding of the scope and type of NBPs in use, and Phase 2 revealed some of the relational, ethical, and systemic complexities underlying those practices. Together, they offer a foundation for imagining NBPs not as supplementary techniques, but as relational praxis with the potential to transform social work’s engagement with ecological justice. The next chapter builds on this potential by situating these findings within the study’s theoretical framework and the existing literature.

Chapter 6: Discussion

This chapter builds on the findings in Chapter 5 by situating them in relation to existing research, my theoretical framework, and the study's research questions. What emerges is not a simple framework for NBPs but a praxis that includes tension and contradiction. Social workers described NBPs as both responsive and constrained, shaped by competing pulls between standardized models and relational praxis, anthropocentric framings and trans-species ethics, institutional control and place-based resistance, colonial inheritances and decolonial aspirations. These frictions reveal that engaging in NBPs is less about applying a prescriptive method than about navigating the complexities of practice in *relation*. The discussion unfolds across four sections. First, I examine how NBPs are co-created as situated relational praxis that resists standardized models. Second, I trace the movement toward trans-species ethics and justice. Third, I consider how social workers disrupt institutional control by reconfiguring concepts of place. Finally, I turn to the possibilities of decolonial and interdependent world views. Taken together, these sections suggest that NBPs are not a discrete set of techniques but an evolving praxis that has the potential to unsettle the profession's anthropocentric, neoliberal, and colonial foundations while opening space for more relational and eco-social futures.

Beyond Standardized Models

First, findings from both the survey and narrative interviews indicated that NBPs resist codification within standardized models of practice. Rather than fixed or prescriptive techniques, they emerged as situated and co-constructed engagements shaped through relationships with clients, environments, and more-than-human actors. This development unsettles the profession's reliance on replicability and predictability as markers of legitimacy, highlighting instead an ethic of responsiveness, flexibility, and mutuality. The subsections that follow situate these insights

within broader scholarly debates: first, by examining how NBPs can be understood as relationally negotiated rather than tool-based interventions and second, by exploring how practice itself can catalyze ecological awareness, complicating linear models that assume belief precedes action. Together, these arguments position NBPs not as informal improvisations but as a praxis that redefines expertise, challenges the dominance of standardized evidence-based frameworks, and opens space for eco-social, relational forms of care.

Co-Creating NBPs: Relational and Adaptive Practices

In this study, the findings revealed that NBPs were not experienced as fixed interventions, but rather as relational and adaptive processes. Walking outdoors was the most common activity, followed by gardening, and animal-assisted or land-based healing practices. Narrative data further demonstrated that these practices were shaped in context, negotiated with clients, and embedded in everyday relationships. For example, sessions held on porches, cycling alongside clients, or weaving metaphor into conversation were framed not as improvisations but as intentional acts of responsiveness and mutual attunement. Notably, survey data revealed no significant associations between engagement in NBPs and demographic factors, including age, gender, education, or geography. The absence of demographic predictors underscores that inclusion of NBPs may not be reduced to individual characteristics or professional profiles; instead, they appeared to reflect how social workers respond to opportunities and constraints in their environments. Such findings challenge efforts to codify NBPs into standardized models, reinforcing the argument that NBPs are adaptive, situated and co-constructed with clients.

This resistance to codification can also be situated in relation to the PIE paradigm, which has long anchored social work's theoretical foundations. Although influential, PIE has been critiqued for reducing "environment" to social contexts and for neglecting ecological relations,

thereby reinforcing anthropocentric assumptions (Philip & Reisch, 2015; Gray & Coates, 2012; Des Marais et al., 2016). Critiques of PIE from participants like James and Olivia in this study mirror these scholarly concerns, describing PIE as treating nature as backdrop rather than relation. These resonances suggest that NBPs not only resist standardized models of practice but also push against the conceptual limits of concepts like PIE, opening possibilities for relational and eco-social orientations to care.

As outlined in Chapter 2, much of the eco-social work literature has concentrated on macro-level concerns such as natural disasters (Case, 2017; Dominelli, 2013), food insecurity (Besthorn, 2013), and ecological loss (McKinnon, 2008). Although important, this body of work has paid only limited attention to how nature appears in daily practice with clients. Although some scholarship has begun to consider clinical and applied contexts (Besthorn, 2014; Des Marais et al., 2016; Matutini et al., 2023; Ramsay et al., 2023), understanding of eco-social work remains insufficiently developed (Bexell et al., 2019; Kemp, 2011; Krings et al., 2020; Molyneux, 2010; Thysell & Cuadra, 2023). This study contributes to these conversations by offering thick descriptions of how social workers already incorporate nature into practice in ways that resist reduction to “tools” or add-on techniques. What emerged was not nature as an external element slotted into professional practice, but nature as a relational presence co-produced with clients in situated and culturally meaningful ways. Rather than positioning nature simply as an external backdrop, NBPs in this study unfolded through “becoming-with” more-than-human actors (i.e., herbs, urban animals, or shifting weather), foregrounding interdependence and relationality as central to the therapeutic process. By contrast, Boetto et al. (2020) collaborated with Australian social workers to plan, implement, and evaluate eco-social interventions using a structured transformative practice model, resulting in outcomes such as calming spaces, group

programs with sustainable living components, and organizational training on environmental issues. Both studies highlight the value of integrating ecological practices within social work, and the present findings illustrate how eco-social practices can also emerge through negotiated, situated encounters that unfold relationally in everyday contexts.

Although NBPs in this study emerged as responsive and relational, they also revealed how institutional and professional contexts shape the possibilities of ecological practice. Efforts to “green” social work through environmental or sustainability initiatives can, at times, modernize rather than transform existing arrangements, reinforcing managerial and neoliberal ideologies under the language of care and innovation (Atilés-Osoria, 2014; Gray & Coates, 2015; Hawkins, 2010). Similar patterns appear in green social work, where environmental features are often added to professional routines without redistributing authority or reorienting ethics toward ecological accountability (Dominelli, 2012; Drolet et al., 2015; Teixeira & Krings, 2015). As Boetto et al. (2020) noted, without critical attention to power and institutional culture, environmental integration can remain cosmetic—an update that sustains rather than unsettles the hierarchies embedded in practice. In contrast, the findings of this study suggest that ecological practice acquires transformative potential not through codification, but through everyday acts of responsiveness that reconfigure relations among workers, clients, and the more-than-human world.

When Practices Shape Belief: Nonlinear Pathways to Ecological Relations

This study’s findings revealed that the relationship between ecological belief and NBPs was not linear. Survey results showed that ecological beliefs, measured by the NEP Scale, did not significantly predict engagement in NBPs. Participants scored an average of 60 out of 75 on the NEP, suggesting that social workers engaged in NBPs were neither more nor less

environmentally inclined than peers in Shaw's (2013) study of NASW members. This finding also highlights possible limitations in instruments such as the NEP, which may oversimplify complex, situated, and relational understandings of ecological awareness. The finding also complicates eco-social work writing that presumes belief precedes practice (Besthorn 2012, 2014). For example, social workers like Ashley moved sessions outdoors only because indoor spaces were unavailable during the COVID-19 pandemic, yet these encounters soon became central to their therapeutic style. Others adopted walking sessions at their clients' suggestion, which subsequently reshaped their understanding of therapeutic space. Such examples indicate that ecological awareness was not always a precursor to practice but could arise through practice itself, as embodied encounters catalyzed new understandings of relational ethics and environmental care.

Eco-social work scholarship has tended to assume a belief-to-practice trajectory, meaning that social workers must first hold ecological values and then translate these convictions into professional action. In this framing, ecological values are treated as the foundation from which practice flows. Besthorn (2012), drawing on deep ecology, argued that eco-centric commitments are a necessary precursor to ecological practice, and Bryant and Williams (2020) similarly emphasized environmental consciousness as a driver of eco-social work. The findings of this study complicate this orientation by showing that ecological awareness can emerge from practice as well as precede it. This practice-to-belief dynamic resonates with theories of experiential and reflective learning. Schön's (1983) concept of reflection-in-action highlights how professionals generate new understandings in the moment of practice, while Kolb's (2014) experiential learning model emphasizes cycles of doing, reflecting, and re-conceptualizing. Fook and Gardner (2007) similarly argued that critical reflection embedded in everyday practice is a driver of

transformative learning in social work. Read together, these perspectives help frame the present findings: Ecological commitments may not need to be fully formed prior to practice but rather able to develop iteratively through embodied acts such as walking outdoors, attending to the weather, or engaging with more-than-human presences.

The implications for social work education are significant. If ecological ethics can emerge through practice, then pedagogical approaches that rely primarily on abstract or classroom-based instruction may be insufficient. Land-based, experiential, and relational pedagogies are better positioned to cultivate ecological awareness by allowing students to engage with and reflect on new paradigms of care. In this sense, understanding of NBPs reveals that practice and belief are not linked in a simple linear sequence but are mutually constitutive, with each shaping and reshaping the other. At the same time, findings revealed that NBPs were often understood as resistant or alternative practices. Although neoliberalism was not explicitly named, these practices can be read as counter-movements against institutional models that prioritize individualism, efficiency, and deficit-based interventions, aligning with eco-social critiques of neoliberalism (Gray & Webb, 2013). In this light, NBPs are not only therapeutic strategies but also ethical and political interventions: situated practices that reclaim relational care within systems of constraint. Their nonlinear, negotiated quality resists codification into standardized models. Instead, it highlights the importance of situated ethics that privilege responsiveness over replicability, thereby complicating evidence-based discourses in the profession (Prock et al., 2022).

Toward Trans-Species Social Justice

Second, the findings from this study mirror the literature's critique of anthropocentrism in social work (Besthorn, 2012; Boetto, 2019; A. Matsuoka & Sorenson, 2013, 2018) while

opening possibilities toward trans-species ethics. Ecological beliefs and practices often reproduced human-centred framings, positioning nature as a resource for therapeutic benefit while leaving systemic forms of species injustice unexamined. However, everyday encounters with wildlife, weather, and land revealed openings for relational attunement, co-agency, and multispecies/trans-species care. Storytelling further complicates this terrain, sometimes expanding possibilities for trans-species connection, while at other times reproducing sentimental or truncated depictions that obscure structural violence. Together, these dynamics illustrate both the limitations and the possibilities of NBPs, pointing toward the need for eco-social work to engage more explicitly with trans-species social justice, which refers to justice across and beyond species (A. Matsuoka & Sorenson, 2013).

Anthropocentrism and the Limits of Ecological Belief

The findings revealed that anthropocentric framings actively shape NBPs, with nature often positioned in service of human healing even when ecological ontologies were articulated. Such perspectives reproduce the environmental-justice-to-human-benefit tilt critiqued by scholars (Gray & Coates, 2012, 2015; Miller et al., 2012). Survey respondents cited client well-being as the primary reason for incorporating nature into their practice, with relatively few citing ecological or justice-oriented rationales. Such framings can be read as narrowing eco-social practice to therapeutic benefit, while leaving less visible questions of reciprocity and accountability to more-than-human communities. Qualitative survey findings reinforced this ambivalence. Nature was often described as calming or grounding, but these effects were framed primarily in human terms. Yet, narrative data complicate this picture: As well as human-centred framings, social workers also invoked themes of non-human sentience non-human epistemologies alongside entanglements with land, power, and colonial history, suggesting that

ecological practice was emmeshed with wider reckonings around dispossession and inequality. These moments did not displace anthropocentrism, but they show that NBPs carried within them efforts to grapple with relational justice that extend beyond the human. Such openings resonate with calls to move beyond reformist models of green social work (Dominelli, 2012) toward more critical, decolonial approaches that foreground justice and accountability (Coulthard, 2014; Tuck & Yang, 2012). Rather than treating contradictions as inconsistencies to be corrected, this study suggests they are evidence of an unfinished and generative terrain. As CAS has long argued (Best, 2007a; Regan, 1983), anthropocentric norms remain deeply entrenched, yet even partial openings and moments of questioning invite reflection and potential transformation. For social work education, the existence of these openings underscores the importance of eco-pedagogies that engage directly with anti-anthropocentrism, multispecies/trans-species ethics, and truncated narratives, supporting social workers to reflect not only on what is present in their accounts of practice, but also on what remains unexamined.

Although the findings revealed openings toward trans-species ethics, they also highlighted how intersectionality must be understood as extending across both human and more-than-human lines. Black feminist scholars were among the first to conceptualize intersectionality as the interwoven nature of race, class, gender, and other identities (Crenshaw, 1989; Yuval-Davis, 2006). Within CAS, intersectionality explicitly includes speciesism and anthropocentrism (Best, 2007b; Nocella et al., 2014; R. J. White, 2021). Participants' accounts reflected these entanglements unevenly: Maya's reflections on racialization in outdoor spaces and Haider's observations on gender and accessibility demonstrated how NBPs are mediated by intersecting identities and oppressions. At the same time, the tendency to frame animals or nature primarily as therapeutic resources reveals the persistence of speciesism within practice. In this way, the

findings both support Arathoon's (2024) argument that intersectionality can reveal power relations when species are taken seriously, and also show how eco-social work currently falls short of realizing this potential. Incorporating CAS and intersectional ecofeminist analysis into eco-social practice is therefore essential, not only to recognize human differences but also to expose how anthropocentrism and species hierarchies are reproduced within NBPs.

Everyday Relational Practices and Multispecies Co-Agency

Interview narrative findings revealed moments in which nature was conceptualized not only as a setting for practice but also as an active participant within therapeutic encounters. Client connections with urban wildlife, including bird-watching or walking in the rain, pointed toward what Haraway (2008) describes as multispecies "contact zones": spaces where human and non-human lives are entangled and intertwined in ways that shape relational practice. These micro-encounters operationalize CAS arguments that ethics are enacted in spatial practice (A. Matsuoka & Sorenson, 2014; Wolch & Emel, 1998). In such instances, nature was not treated as a backdrop but as a collaborator, influencing emotional process and ethical orientation. The findings showed that some social workers expressed discomfort with extractive framings of nature as resource, describing instead subtle forms of attunement, silence, and presence that complicated human–nature binaries. These moments, although often embodied rather than explicitly theorized, can be read as cracks in anthropocentrism and as openings toward ecocentric practice. They resonate with calls for deeper philosophical engagement, understood as critical reflection on the dominant paradigms shaping social work, including modernity and neoliberal capitalism, as well as the exploration of alternative Indigenous and decolonial world views that reorient practice toward justice and interdependence (Panagiotaros et al., 2022).

Yet these shifts were uneven and selective. Companion animals and urban wildlife were frequently described with warmth, with their presence often mediated through symbolic or therapeutic functions. Although not problematized within the narratives themselves, K. Davis (2018) cautioned that, without engagement with speciesism and power, animals risk being positioned primarily as facilitators of human emotional work. This risk is consistent with CAS and other scholarly critiques of using animals instrumentally in care (Irvine, 2007; A. Matsuoka & Sorenson, 2013). These openings for interaction and description did not arise from explicit ecological training but from embodied encounters in practice, suggesting that anthropocentrism may be unsettled through everyday acts of attention and presence, even where such gestures remain partial or under-theorized. Yet the findings also point to limits: Without explicit reflection on power, colonial history, and systemic injustice, these everyday encounters risk closing into sentimentality rather than evolving into politicized eco-social praxis. In this tension, NBPs demonstrate both the possibilities and the constraints of moving toward multispecies/trans-species ethics within social work.

The findings on spirituality in relation to NBPs were brief, but resonate with ecofeminist accounts of spirituality as a potential anti-anthropocentric orientation. Bell et al. (2022) described spirituality as a reverent form of relationship with the Earth, while Hettinger (1995) emphasized ecospirituality's resistance to human exceptionalism. This conceptualization aligns with participants' descriptions of nature as spiritually meaningful, animals as "good medicine," and faith traditions reframed to emphasize responsibility rather than dominion. Although some participants described spirituality in non-religious ways, others rooted their spiritual orientations in religious traditions. James explicitly connected his practice to Christianity, drawing on his faith as a resource for ecological responsibility. He reframed dominion not as control but as

responsibility and care for non-human life, integrating theological roots with anti-anthropocentric ethics. This example illustrates that spirituality in social work cannot be reduced to the individualized “spiritual-but-not-religious” discourse, which has been critiqued for its Euro-Christian and exclusionary tendencies (Wong & Vinsky, 2009). Instead, participants’ narratives reflected plural and situated orientations that expanded practice by affirming spirituality as a relational and ethical dimension of eco-social work. In this way, spirituality emerged as another mode of resisting hierarchical framings and affirming interdependence between humans and the more-than-human world.

Narrative Openings Through Artifacts and Animal Stories

In this study, interview narratives highlighted storytelling and place-based experience as central to how ecological awareness was cultivated in practice. Stories about companion animals during online sessions with students or in a hospital while a patient was receiving dialysis, were described as openings into relational engagement. These stories invited clients and social workers into attunement with more-than-human life, suggesting that narrative itself may have functioned as a mode of practice through which ecological awareness was enacted. Although participants did not frame these practices as pedagogical, they can be read alongside emerging scholarship that positions narrative as an eco-pedagogical method capable of disrupting anthropocentric assumptions and fostering reflective practice (Smith-Carrier & MacArthur, 2023).

From a narrative inquiry perspective, stories do not simply describe experience but actively co-construct ethical orientations. Derrida (2002) warned that anthropomorphism risks reducing animals to human likeness; however, K. Davis (2018) suggested that narrative, when held reflexively, can destabilize human centrality and open up counter-anthropocentric

possibilities. The findings reflected this ethical complexity. Some stories drew on animal metaphors to illuminate human emotional states, while others centred the agency and presence of animals themselves. This variation underscores the need for critical narrative reflexivity: storytelling can challenge relational ethics, but it can also inadvertently reproduce human exceptionalism.

Some narratives extended multispecies and trans-species consideration by foregrounding animal presence or relationality, and others fell back into sentimental or truncated depictions that obscure structural violence. As Kheel (1993) argued, such “truncated narratives” risk masking systemic hierarchies, and K. Davis (2018) cautioned that without explicit engagement with speciesism, animals are often positioned as facilitators of human emotional work rather than as agents in their own right. These dynamics were visible in this study: Although companion animals and urban wildlife were described with warmth, farmed or commodified animals were almost entirely absent. This silence, analytically, is significant. It underscores how NBPs can both open relational space and simultaneously reproduce species hierarchies, revealing the unfinished terrain of eco-social practice. Such narrative silences resonate with critiques across social work scholarship, including violence against women, racism, disability, and senior housing research, that caution against depoliticized feel-good stories, which mask structural injustice across species (A. Matsuoka & Sorenson, 2014, 2023; A. Matsuoka et al., 2020). Read through this lens, connection alone is insufficient; without explicit attention to power, storytelling can slide into a form of empathic anthropocentrism.

In this study, artifacts such as drawings, photographs, and small objects were incorporated alongside animal stories and helped shape the narratives themselves. They reflected my dual ontology by granting place, material objects, and the more-than-human world value as

co-producers of meaning, rather than as a backdrop. When participants introduced an artifact, conversations shifted from abstract claims to situated descriptions of weather, soil, animals, and sensory detail. This pattern enriched narrative inquiry by showing that stories are more than words: Artifacts prompted memory, surfaced awe, and enabled participants to convey tacit or spiritual meanings that would have been difficult to articulate otherwise. Their presence also highlighted methodological value by deepening thick description, expanding rapport (Kvale, 1996), and making visible the multispecies co-agency at the heart of NBP.

At the same time, the findings also revealed glimpses of narrative as a method of unlearning anthropocentrism. Everyday acts of attunement, such as listening, observing, and sitting in silence, created openings for multispecies and trans-species imaginaries and for re-imagining nature as a co-agent in therapeutic work. These moments suggest that narrative can function as a political practice when approached reflexively, expanding the possibility of solidarity across species lines. In this sense, the findings extend CAS within social work by showing that, although systemic species injustice remains largely unaddressed, narrative holds significant pedagogical and ethical potential. Storytelling, when reflexively situated, unsettles human-centred framings of care and aligns with emerging scholarship that calls for a trans-species social justice as central to eco-social work.

Resisting Institutional Control Through Place-Based Praxis

Third, the findings suggest that NBPs were not merely therapeutic techniques, but rather ways of negotiating space as a political and ethical terrain. By moving beyond conventional clinical settings, social workers reconfigured where practice could occur and, in doing so, unsettled the hierarchies and norms that often structure social work. These place-based practices reveal how gardens, parks, porches, and other shared spaces have become sites of relational care

and quiet resistance, challenging the anthropocentric and neoliberal assumptions embedded in professional institutions. The subsections that follow examine this reconfiguration through two lenses: first, how therapeutic spaces were mobilized to resist institutional control; and second, how spatial arrangements reflected and reproduced speciesist hierarchies that dictate which forms of life are rendered visible within practice.

Reconfiguring Therapeutic Spaces: Challenging Institutional Norms

The significance of space, both physical and symbolic, was woven throughout the narrative findings. Both the survey and narrative data were collected during the COVID-19 pandemic, a period that deeply reshaped how social workers understood and used space in their practice. Since then, scholarship has documented the rapid changes social workers worldwide have experienced in terms of where and how they practice (Saraniemi et al., 2023). Much of this literature has focused on the transition to digital spaces and the challenges it produced for maintaining professional boundaries and coordinating interprofessional care (Mishna et al., 2022). Dominelli (2021), writing within the framework of green social work, emphasized the importance of digital skill development and ethical considerations as social work practice increasingly moved online.

The findings of this study contribute to the larger conversation by drawing attention to a parallel yet less explored spatial reconfiguration: the shift toward outdoor and shared public spaces as sites of therapeutic work. Walking beside clients in parks, sitting in gardens, or meeting in transitional spaces such as porches and courtyards represented more than pragmatic adaptations during a crisis. They can be read as intentional efforts to sustain client engagement while also unsettling institutional norms and relational hierarchies. In these moments, social workers mobilized place as a political and ethical intervention, echoing Bryant and Williams's

(2020) assertion that social workers actively produce space through everyday choices.

Traditional indoor settings, such as hospitals, offices, and counselling rooms, can be misaligned with the values of relational care, ecological awareness, and community accountability. By contrast, NBPs opened alternative possibilities in which power dynamics could be recalibrated: walking with rather than sitting across from, attuning to weather and movement, and creating space for conversations and emotions less accessible within four walls. As Lefebvre (1974/1991) asserted, spaces are socially produced through power, access, and ideology. Read through this lens, social workers' efforts to practice beyond institutional boundaries can be interpreted as quiet forms of resistance to neoliberal realities, aligning with critiques that social work often reinforces rather than unsettles dominant institutional systems (A. Matsuoka & Sorenson, 2013). These findings suggest that NBPs are not only about therapeutic approaches but also about transforming the institutional conditions of practice, positioning place as a critical terrain for eco-social work.

Spatial Hierarchies and Speciesism

Building on insights above, that space is socially produced through power and ideology, a CAS lens highlights how participants' accounts also reflected speciesist arrangements that regulate which forms of life are rendered visible, valued, or permissible in therapeutic settings. Participants often described NBPs involving pets or urban wildlife, but the absence of narratives involving farmed or commodified animals is telling. A. Matsuoka and Sorenson (2014) argued that space itself is structured through speciesism; a form of "spatial violence" that reinforces the invisibility of certain animals across public life (Wolch & Emel, 1998). This omission reflects broader patterns in social work, where eco-social approaches have rarely examined how spatial hierarchies perpetuate animal oppression alongside human oppression (Ferreira et al., 2024;

Sorenson & Matsuoka, 2019). From this perspective, parks, gardens, and even homes are not neutral “natural” spaces, but socio-political constructs shaped by colonial, capitalist, and anthropocentric values that determine who and what belongs (Coulthard, 2014; Tuck & Yang, 2012).

Several participants voiced a desire to reconnect with land or resist bureaucratic constraints. Read through CAS and decolonial scholarship, these practices can be interpreted as gestures toward disrupting oppressive systems through place-based praxis, positioning nature not only as a site of healing but also as a terrain of resistance. Faye and Tracy both described how outdoor practice unsettled professional authority and disrupted the hierarchies reinforced in institutional spaces; Joseph shared ritualized outdoor practices to honour Indigenous teachings. Such examples suggest that spatial reclamation can function as both ecological and ethical praxis, resonating with Quarmby’s (2020) contention that defending land, water, and air is itself justice work.

Yet participants’ practices were typically grounded in subtle, relational gestures rather than overt activism. These micro-practices, such as attending, noticing, and being present, can be read as forms of resistance that align with Tronto’s (2013) framing of care as political action. Such findings complicate assumptions within eco-social work that political engagement must take the form of overt public advocacy (Alston, 2015; Boetto et al., 2020; Dominelli, 2012). Instead, they point to how contestation of dominant systems may emerge through everyday relational work that reorients social workers away from clinical individualism and toward interspecies interdependence. In turning toward diverse spaces—indoor, public, outdoor, shared, and sensory—social workers not only co-produced therapeutic environments but also, intentionally or otherwise, challenged speciesist and neoliberal arrangements of space. These

spatial innovations reposition NBPs as counter-practices that reclaim care, reciprocity, and ecological accountability within the social work field. Read through eco-social work and CAS frameworks, they reveal space itself as a site where multispecies/trans-species justice and therapeutic possibility converge.

From Colonial Paradigms Toward Decolonial and Interdependent World Views

Finally, the findings highlight both the constraints imposed by colonial and neoliberal paradigms within social work education and practice, as well as the opportunities created when social workers draw on Indigenous, cultural, and relational world views. In this study, NBPs were often developed without formal training or systemic support, yet they carried desires for more expansive orientations to land, multispecies and trans-species life, and decolonial philosophies of care, knowledge and relational accountability. These findings respond to documented gaps in Indigenous and global perspectives within environmental social work discourse (Atiles-Osoria, 2014; Basso, 1996; Zapf, 2010). Realizing this potential requires more than curricular add-ons; it calls for restructuring the profession's underlying assumptions about what counts as knowledge, whose voices and relations are valued, and how care is defined. This means unsettling anthropocentric, neoliberal, and settler-colonial orientations and advancing relational, decolonial and multispecies/trans-species ethics.

Cultural Connections: Decolonial Insight From Practice

In this study, findings revealed that spiritual and cultural relationships to nature were articulated through ancestral knowledge, migration histories, and Indigenous teachings. While not always framed as overtly political, these narratives can be read as reflecting a decolonial sensibility: an understanding of nature as a site of belonging, dispossession, and resistance. Maya, Lisa, and Amin highlighted reconnection with land-based practices as a means of healing

intergenerational trauma or cultural dislocation, signalling that ecological relationships were entangled with memory, identity, and survivance rather than solely therapeutic technique. Such insights resonate with Bell et al.'s (2019) work, which showed how oppressed communities have long mobilized environmental practices as strategies of care, continuity, and protection in the face of ongoing dispossession. At the same time, the findings suggest that these relational engagements were not always explicitly connected to critiques of colonialism, Whiteness, or racial capitalism within professional practice. This absence should not be interpreted as a failure of social workers, but as evidence of the difficulty of connecting intimate relational work to structural realities. The narratives revealed social workers navigating colonial and neoliberal conditions in situated ways with their clients, even if these forces were not always explicitly named. As Murphy (2021) said,

Taming a continent meant making [W]hite (individual and collective) property of land, non-human, and human life. In the process, settlers initiated a mode of life that fundamentally reconfigured socioecological dynamics in the Americas by engulfing the Earth's varied human, non-human, and inhuman elements into relations of domination (p. 127).

This framing underscores relational practices being already intertwined with violent histories, whether or not social workers recognize them. The challenge, then, is not to dismiss these practices as insufficient but to connect them more explicitly with structural advocacy. As A. Matsuoka and Sorenson (2013) argued, without sustained attention to racial capitalism and colonial power, eco-social practice risks reproducing the limitations of liberal environmentalism. Pulla (2013) similarly cautioned that without centring structural power, eco-social work frameworks can devolve into depoliticized acts of personal connection. Collectively, these

insights invite social workers to go further: to link relational practices with explicit efforts to contest the systemic forces they implicitly resist. At the same time, it is necessary to consider who is most visible within these accounts and what perspectives remain absent. It is important to note that the demographic profile of participants in this study reflects broader patterns in Canadian social work (J. J. Kim, 2025) and is similar to that of Ashcroft et al.'s (2022) study on Ontario social workers, where the majority of survey respondents identified as White women with graduate-level education. This pattern underscores ongoing limitations in representation. The demographic alignment suggests that the perspectives captured here address the research questions and the original purpose of this study, which is the first of this kind. However, the relative absence of racialized, Indigenous, and gender-diverse voices, particularly in the survey, likely reflects the broader structural inequities within the profession, which continue to shape whose relationships to land, nature, and care are visible within institutional contexts and considered as the knowledge unless this limitation is acknowledged. Further studies need to focus on understanding the diverse epistemologies, lived experiences, and positionalities that shape nature-based or decolonial practice. Recognizing these limitations also reinforces the need for creative research design that centres the knowledge and leadership of those communities most affected by colonial and ecological violence.

Gaps in Social Work Education

Despite the profession's stated commitment to social and environmental justice, this study's findings reveal a disconnect between educational preparation and the realities of eco-social work practice. Although nearly 90% of survey respondents held graduate-level training, most reported never receiving formal instruction on ecological ethics, environmental justice, or the role of more-than-human relationships in social work. This absence reflects broader critiques

that eco-social perspectives remain marginalized within curricula (Boetto, 2017; Gray et al., 2013; Harris & Boddy, 2017). The results are similar to those of Harris and Boddy (2017), an Australian survey, where over two thirds of social workers reported no environmental content in their programs, despite widespread support for its inclusion. In this study, NBPs often emerged not from formal instruction but through personal experimentation, community engagement, and client-led learning.

These findings call for closer attention to Jones's (2010) identification of place-based learning as an underutilized yet powerful ecological pedagogical tool. Yet, when examined through eco-social work and decolonial scholarship, the education gap points not only to curricular omission but also to a deeper philosophical lag, meaning that while practice is beginning to shift toward ecological and relational orientations, the underlying assumptions of social work education remain anchored in anthropocentric, neoliberal, and settler-colonial paradigms. Many social workers described frustration that although NBPs reshaped their understanding of healing and relationality, their training had not equipped them to integrate ecological concerns into ethical frameworks, assessment tools, or interventions. This absence constrains the profession's capacity to embed eco-social commitments.

The findings also indicate a desire to reconnect with social work's historical roots in community organizing and place-based care. This desire resonates with calls to reclaim the profession's early foundations and public health traditions, which linked social care to local ecologies, collective survival, and structural change (Coates, 2003; Besthorn, 2012; McKinnon & Alston, 2016; Nesmith & Smyth, 2015). Such a reorientation contrasts sharply with contemporary trends toward individualized, clinical, and neoliberal models. Together, these

insights signal that ecological content should not be treated as a discrete elective, but as integral to preparing social workers for the ethical and relational demands of eco-social work.

Practice Innovation and Desire for Change

The findings also revealed a growing need for innovation within social work frameworks to accommodate and legitimize eco-social practice. Although many social workers described engaging in nature-based interventions, they also reported feeling professionally exposed or uncertain about how such practices were perceived. Concerns centred on confidentiality in public spaces, liability in nontraditional environments, and the absence of guidance in existing codes of ethics. These reflections highlight what Molyneux (2010) described as a persistent ethical and policy gap, echoing Jordan and Marshall's (2010) argument that outdoor therapeutic work alters the dynamics of the encounter in ways that existing ethical frameworks do not adequately address.

Here, innovation was not described as novelty but as rethinking the assumptions of where and how social work occurs. Other helping professions have integrated outdoor or experiential modalities (e.g., Trauma; Mathias et al., 2025), but the approaches in this study were grounded in relational, ecological, and ethical commitments rather than psychological techniques. Codes of ethics already mandate attention to both individual well-being and social transformation (Boddy et al., 2018), a mandate scholars argue must extend to ecological and multispecies/trans-species justice (Gray & Coates, 2012). If well-being is understood as interdependent and multispecies (C. Noble, 2016), then eco-centred approaches become not simply relevant but ethically imperative.

The findings also identified a desire for tools, policies, and infrastructures to support eco-social innovation: clearer guidance for nontraditional environments, recognition of interspecies

relationships as legitimate aspects of care, and opportunities for cross-disciplinary collaboration. Although ecological systems theory may provide one bridge, Boetto (2019) argued that the ecological moment requires a deeper paradigm shift from human-centred to relational eco-practice. These insights suggest that innovation alone is insufficient; institutional frameworks must also adapt to legitimize practices that are already reshaping the profession.

Shifting Pedagogical Foundations

The findings of this study suggest that eco-social work requires not only new skills but a rethinking of social work's pedagogical foundations. Engaging with nature in practice disrupted assumptions about control, vulnerability, expertise, and the social worker's role. These dynamics highlight the need for pedagogical approaches that cultivate relational, reflective, and anti-anthropocentric orientations (Jones, 2010). Scholars argue that eco-social learning must extend beyond content acquisition to foster ethical commitments grounded in interdependence and ecological responsibility toward human and non-human species (Boetto, 2019; Närhi & Matthies, 2016). This commitment requires troubling dominant assumptions within social work education, particularly those rooted in colonialism, neoliberalism, and human exceptionalism, rather than simply inserting ecological material into existing frameworks.

The inclusion of environmental justice in the CASWE (2021) accreditation standards marks a symbolic shift toward such commitments. Yet accreditation language alone is insufficient to generate meaningful curricular change. Moving beyond aspiration will require structural and pedagogical transformations that integrate ecological, anticolonial, and more-than-human perspectives as foundational to the profession's ethical commitments (Billiot et al., 2019; Ferreira & Matsuoka, 2025). The findings further indicate that this shift would involve legitimizing place-based learning, embracing more-than-human care practices, and preparing

social workers to identify and navigate the systems of domination shaping their work with both human and non-human communities. Such transformations would reposition eco-social work learning from the margins of the curriculum to the core foundations of the profession, shaping how knowledge is defined, how ethics are framed, and how social workers are prepared to practice in relation to both human and more-than-human communities.

Toward an Integrated Ethical Framework

Taken together, these findings suggest that eco-social work reform must move beyond aspirational vision statements and toward integrated, justice-oriented ethical paradigms. Such paradigms reconceptualize nature not as a backdrop or resource, but as an active collaborator in shaping ethical, political, and relational practices (Haraway, 2016; Kimmerer, 2015). Social workers in this study demonstrated the creativity, commitment, and relational insight required to lead this transition. For these emerging practices to take root, however, institutional, educational, regulatory, and professional infrastructures must provide the philosophical, material, and relational supports necessary to legitimize and sustain this work.

The literature cautions that prevailing ideas of “well-being” in social work are deeply shaped by neoliberal values of productivity, extraction, and self-sufficiency (Becker et al., 2021; Besthorn, 2012; Gray & Webb, 2013). Although survey data revealed that many social workers viewed nature as beneficial to human health, interview narratives pointed to more radical possibilities: framing humans not as separate from nature but as participants within entangled multispecies worlds. These findings also underscore the significance of Indigenous teachings, spiritual relationships with land, and cultural connections to plants and animals, signalling the importance of grounding future eco-social work not only in ecological awareness but also in anticolonial and relational ontologies.

As Brazier (2014) explained, the shift toward ecological and ethical care begins with re-rooting ourselves in the interconnected webs of land, memory, and community. Embedding Indigenous, decolonial, and multispecies/trans-species ways of knowing into future ethical frameworks is therefore not optional but central to any meaningful evolution of eco-social work (Simpson, 2014; Tuck & Yang, 2014). These findings suggest that the future of eco-social work cannot be secured through incremental change but requires a philosophical and ethical consolidation. Positioning Indigenous, land-based, and relational ontologies as foundational disrupts the colonial and neoliberal assumptions that continue to shape the profession. In this sense, although accounts revealed both frustrations and aspirations, when read through decolonial and multispecies/trans-species frameworks, they exposed the limits of current approaches and pointed toward the transformative potential of embedding social work in a more expansive ethics of care.

Conclusion

This chapter has shown how NBPs emerge not as fixed techniques but as a relational, adaptive, and situated praxis that unsettles dominant professional perspectives. Across the findings, three tensions stand out: between anthropocentric framings that position nature as a tool for human healing and openings toward multispecies/trans-species ethics; between institutional and neoliberal constraints that reinforce clinical hierarchies and the everyday place-based practices that quietly resist them; and between colonial legacies in social work education and the culturally rooted, land-based, and spiritual engagements that gesture toward decolonial and interdependent ontologies. These tensions are not contradictions to be resolved, but markers of a contested and generative terrain in which ecological awareness arises as much through embodied practice as through belief. In this context, storytelling can both reproduce and unsettle

anthropocentrism, and space itself becomes a site of care that is both politically and ethically significant. The findings suggest that social workers are already experimenting with relational, eco-social, and multispecies and trans-species practices, even as institutional and educational infrastructures lag behind, revealing a profession in transition. Taken together, the findings suggest that the future of eco-social work cannot be secured through incremental curricular adjustments or discrete “green” techniques but rather requires a reorientation of its philosophical and pedagogical foundations. By reconceptualizing nature as collaborator, embedding Indigenous and decolonial ontologies, and recognizing space, story, and practice as terrains of justice, eco-social work can move beyond its anthropocentric, neoliberal, and colonial inheritances. In this sense, the findings affirm the central argument of the dissertation: The path forward for social work lies in cultivating an eco-social, anti-anthropocentric, and liberatory praxis that centres interdependence across human and more-than-human worlds.

Chapter 7: Implications and Conclusion

This exploratory study set out to address a critical gap in eco-social work: the lack of empirical evidence on how social workers integrate nature into practice. Guided by three research questions: (a) How are Ontario social workers engaging in NBPs with clients? (b) What do they know and believe about nature and the environment in connection with their practice? and (c) What are possible future directions for practice, education, and research? The study engaged CAS, narrative inquiry, and ecofeminism within a sequential mixed methods design. Phase 1 involved a provincial survey of 61 RSW, and Phase 2 included narrative interviews with 15 social workers. This design reflected my dual ontological and epistemological commitments: acknowledging the agency of the more-than-human world while attending to the social construction of meaning. This approach also allowed findings to emerge across both breadth and depth, offering a portrait of NBPs that is empirically grounded, theoretically informed, and attentive to the tensions and contradictions within practice. In what follows, I identify the study's unique contributions to knowledge; implications for research, practice, theory, and education; its limitations; and directions for future research before concluding the dissertation.

Contributions to Knowledge

This dissertation makes four key contributions to knowledge. First, it offers new empirical insight into how social workers in Ontario are already engaging in NBPs. The survey revealed that NBPs are present across diverse practice settings, most commonly in the form of walking outdoors, but also through gardening, animal interactions, metaphors in conversation, and place-based encounters such as sitting in gardens or porches. The survey also identified key barriers, including workplace structures, safety concerns, and beliefs around challenges of confidentiality and anonymity. Narrative interviews expanded on these findings, illuminating the

creativity and care with which social workers navigated these issues. Rather than ad hoc improvisations, participants described adaptive and relational practices that were carefully considered and negotiated in context, highlighting the subtle ways in which NBPs are co-constructed with clients.

Second, this study advances understanding of ecological belief and practice. Survey findings using the NEP Scale suggested that ecological values did not strongly predict engagement in NBPs. Interviews revealed that although participants often held anthropocentric beliefs, framing nature as a tool for human healing, their everyday practices also created opportunities for more-than-human care, relational accountability, and gestures toward resistance to colonial and clinical norms. These findings complicate linear models that assume belief drives practice, showing instead that ecological awareness can arise through embodied encounters in practice itself. This result contributes to ongoing theoretical conversations in eco-social work, decolonial scholarship, and CAS by demonstrating both the persistence of anthropocentrism and the potential for its disruption.

Third, the study contributes to methodological and theoretical development. By combining survey methods with narrative inquiry, the research offers both breadth and depth, yielding rich descriptions that transcend abstract theorizing. A distinctive contribution includes the integration of participant-generated artifacts via drawings, photographs, and creative materials, which expanded the narrative process. These artifacts functioned not as supplementary illustrations but as catalysts that shaped the interviews themselves: They prompted memory, grounded accounts in place, deepened rapport (Kvale, 1996), and surfaced tacit, sensory, and ecospiritual dimensions that words alone could not fully capture. Their inclusion improved credibility through triangulation across modalities and supported analysis of multispecies co-

agency and place. In this way, the study extends scholarship positioning narrative as an eco-pedagogical method, while also demonstrating the methodological value of treating artifacts as integral to narrative inquiry in eco-social work and the theoretical value of integrating CAS and ecofeminism within social work research.

Fourth, the study indicates spirituality may be a dimension of eco-social practice. Read through an ecofeminist lens, spirituality warrants further exploration within eco-social work, for both its potential to resist hierarchy and its role in affirming interdependence with the more-than-human world. Notably, spirituality emerged in plural and situated forms that together resist reduction and instead affirm spirituality as a site for ethical and relational orientation within eco-social work.

Finally, the study offers practical and pedagogical contributions. Participants called for clearer ethical frameworks, tools for practice in nontraditional spaces, and curricular integration of ecological and decolonial perspectives. The findings, therefore, support calls for social work education to move beyond elective “green” content toward embedding ecological, Indigenous, and multispecies perspectives as foundational. The study also highlights the importance of legitimizing NBPs within regulatory and institutional contexts, not only to protect social workers but also to expand social work’s ethical scope toward multispecies/trans-species justice. Together, these contributions address a critical gap in the literature by grounding eco-social work in empirical evidence while extending theoretical, methodological, and practical conversations. They point toward a profession in transition: one where social workers are already experimenting with relational, justice-oriented practices, even as education and regulation lag behind.

Implications

The findings of this dissertation point to significant implications for practice, education, policy, and theory in social work. Although NBPs are already being enacted in diverse and creative ways, they remain largely unsupported by current training, regulation, and theoretical frameworks. The following subsections outline how the insights generated through this study both affirm and challenge existing assumptions, highlighting opportunities for transformation in how social work conceptualizes care, prepares social workers, and situates itself in relation to ecological and multispecies/trans-species justice.

Social Work Practice

This study demonstrates that NBPs are already woven into everyday social work in diverse, often improvised ways, such as walking alongside clients, gardening, using nature metaphors, attending to the weather, or sharing stories about animals. These practices were not described as standardized techniques but as relationally adaptive processes co-produced with clients and shaped by context, identity, and cultural meaning. Narratives revealed how race, gender, disability, and class shaped experiences of access and belonging in nature, highlighting that NBPs cannot be understood apart from intersecting systems of power and privilege. Social workers navigated ethical challenges such as confidentiality, risk, and accessibility, but in doing so, they also reimagined therapeutic relationships outside institutional walls. Such accounts highlight NBPs as more than pragmatic adaptations; they are subtle forms of resistance to neoliberal and institutional models that privilege clinic-based, individualized interventions. Participants' narratives also revealed gestures toward Indigenous teachings and land-based practices, underscoring both opportunities and responsibilities for collaboration grounded in cultural humility, accountability, and ecological justice.

Social Work Education

Findings revealed a striking gap between participants' high levels of formal education and the near-absence of ecological, decolonial, or multispecies/trans-species perspectives in their training. Although many held graduate degrees, few had encountered eco-social frameworks in their coursework, despite expressing a clear desire for tools, theory, and ethical guidance to support their practice. This gap underscores the need to move beyond adding “green” electives and toward embedding ecological, anti-anthropocentric, and land-based commitments as foundational to social work curricula. This work involves legitimizing place-based and experiential learning, amplifying Indigenous knowledge systems, and integrating intersectional ecofeminist and CAS perspectives. In line with CASWE's (2021) recent inclusion of environmental justice, programs must not only symbolically acknowledge ecology but also restructure pedagogy to cultivate reflexive, relational, and justice-oriented orientations that confront colonial, neoliberal, and speciesist world views.

Social Work Policy and Regulation

Findings suggest that current regulatory frameworks may not be well-suited to support emerging eco-social work approaches. Participants expressed concern that existing regulatory frameworks, with their focus on office-based models, confidentiality, and liability, do not adequately accommodate the realities of outdoor, relational, and multispecies practice. Many described feeling professionally exposed or uncertain about how NBPs fit within dominant standards, even as they recognized their therapeutic and ethical value. These concerns highlight the urgent need for policy innovation. Regulatory bodies such as CASWE, CASW, and the OCSWSSW have an opportunity to provide guidance that legitimizes eco-social practice and acknowledges nontraditional spaces as valid sites of care. By developing frameworks that

address the complexities of practicing in public, outdoor, and multispecies contexts, social work can shift away from marginalizing relational innovations and instead recognize them as ethically imperative in the face of an ecological crisis.

Social Work Theory

At the theoretical level, this study extends eco-social work by showing that NBPs cannot be reduced to techniques but must be understood as contested sites where belief, space, and practice intersect. Survey and narrative findings revealed enduring anthropocentric assumptions, nature framed as a therapeutic tool, alongside cracks in this framing: moments of attunement with animals, land, and weather that invited multispecies co-agency and trans-species agency. Narrative stories, spiritual and cultural connections to land, and subtle place-based resistances point toward an ontological shift in how social work might conceptualize care. These findings create openings for theory-building that centres relational and multispecies ethics, ecological interdependence, and narrative as a method of unlearning anthropocentrism. They also underscore the importance of situating NBPs within broader histories of colonialism and neoliberalism, as a reminder that ecological practice is never neutral but always political. In this way, the study contributes to the development of eco-social theory that is at once critical, decolonial, and attentive to the interwoven and entangled lives of humans and more-than-humans.

Limitations

This study was exploratory and represents the first empirical research on NBPs among social workers in the province of Ontario. As such, its goal was not to generate statistically generalizable findings, but to offer situated insights into how social workers integrate nature into client work and how these practices intersect with beliefs, ethics, and professional identity. A

sequential mixed methods design provided both breadth and depth: A provincial survey with 61 participants offered initial mapping, and 15 narrative interviews generated thick descriptions of practice. Together, these phases provided a robust basis for analysis, though several limitations and future directions should be noted.

One limitation was the survey's modest sample size, which fell short of the initial target of 75–100 respondents. Although 61 responses still produced valuable data and facilitated recruitment for interviews, the smaller pool constrained the ability to identify broader trends. Similarly, the study was likely influenced by self-selection bias, as participants may have been drawn to the project due to a personal or professional connection to nature. Rather than undermining the study, however, this bias aligns with the logic of purposeful sampling in narrative inquiry (Patton, 2002), enhancing the richness of narratives by privileging information-rich cases over statistical representativeness. Also, future research might benefit from expanding to include social workers who are not currently engaged in NBPs, offering comparative insights into why some social workers resist or avoid ecological approaches.

Demographic variables did not show statistically significant relationships with engagement in NBPs. Despite intentional efforts to recruit diverse voices, most participants identified as White. This pattern likely reflects the small and self-selecting nature of the sample rather than a true absence of racialized practitioners engaged in ecological work. Nevertheless, it raises important questions about representation, access, and belonging within eco-social work research and practice. These reflections are interpretive rather than conclusive but underscore the need for future studies that intentionally centre Black, Indigenous, and other racialized social workers to deepen understanding of how ecological practice intersects with histories of exclusion, colonialism, and resilience in the profession.

Another limitation was the exclusive focus on RSWs in Ontario. Although appropriate given the study's aims, this scope did not capture the perspectives of allied professionals, community organizers, or peer workers, many of whom may also incorporate ecological and land-based modalities. Nor did it account for the cultural, regulatory, and political differences that shape practice in other provinces or countries. Comparative studies across contexts could deepen understanding of how colonial histories, institutional frameworks, and ecological conditions differently shape NBPs.

The study also did not include the perspectives of clients or service users, human or non-human. This research foregrounds social worker narratives, but the absence of client voices limited insight into how NBPs are experienced and evaluated by those receiving support. Future studies could explore participatory or co-research models, inviting clients to share experiences of therapeutic encounters outdoors, with animals, or through land-based practices. Building on the commitments of CAS, research might also explore how animals can be engaged not as tools or symbols but as collaborators, kin, or ethical subjects in social work practice. Such inquiries would challenge the anthropocentric norms that persist in the profession and expand understandings of justice and care across species boundaries.

Narrative analysis in this study was shaped by my positionality as a White, cisgender, non-disabled woman and by my epistemological and ontological commitments. As with all narrative inquiry, the findings represent co-constructed meaning rather than neutral truth. The selection, interpretation, and presentation of stories reflect relational knowledge-making that is situated and partial. Although this does not diminish validity, it underscores the importance of reflexivity in future research. Encouraging diverse scholars to engage in eco-social inquiry will strengthen the field and disrupt epistemic dominance.

Recommendations for Future Research

Despite the limitations outlined above, this study identifies several directions for future research. First, expanding samples to include non-NBP social workers would clarify the role of belief, identity, and institutional barriers in shaping practice. Examining how factors such as gender, race, class, and ability mediate access to and comfort with nature-based modalities would generate further understandings of inclusivity in eco-social practice.

The role of narrative inquiry and CAS theories also warrants further exploration. This study found that ecological awareness often emerged through practice and story, rather than pre-existing belief, echoing Dewey's (1938) emphasis on experience as central to learning. Future research could investigate how social workers' stories of interspecies connection, ecological care, or resistance to colonial place-making generate ethical commitments and professional identity, extending narrative inquiry as both method and pedagogy. Further work is also needed to integrate CAS into social work. This study highlighted anthropocentric framings alongside openings toward multispecies ethics, and CAS offers a framework for interrogating species hierarchies and imagining animals as co-participants in care. Research exploring trans-species storytelling, multispecies ethics as a competency, and the ethical implications of animals as clients or collaborators could advance the field significantly. Comparative work could also examine the tensions and synergies between CAS and other environmental frameworks, contributing to richer theoretical foundations for eco-social work.

At the institutional level, future research should address barriers within academia itself. Bexell et al.'s (2019) review highlighted the challenges of publishing empirical eco-social research and the dominance of theoretical contributions. Supporting practice-based inquiry, creating spaces for sustainability and justice-oriented scholarship, and legitimizing ecological

ethics within social work education are essential next steps. Examining how recent shifts in CASWE and CASW standards are implemented in curricula and regulations will also be important for assessing whether systemic change follows rhetorical commitments.

Finally, the COVID-19 pandemic created new spatial and relational conditions for practice that shaped the findings of this study. Future research should continue to explore how therapeutic space is being reimagined in light of pandemic legacies, climate crisis, and ecological loss. How social workers negotiate confidentiality outdoors, how embodiment shifts in nontraditional settings, and how risk is reframed in relational terms all remain open questions. Including perspectives of those resistant to or skeptical of eco-social approaches will ensure that future research represents the full breadth of the profession, supporting a more inclusive and critically engaged field.

In summary, although exploratory and bounded in scope, this study opens a wide array of future research pathways. By addressing gaps in sampling, scope, and epistemology, future inquiry can build on these findings to advance eco-social work as a practice, pedagogy, and theory. The opportunities identified here highlight the potential for a justice-oriented, multispecies social work that moves beyond anthropocentrism to embrace interdependence across human and more-than-human worlds.

Conclusion

This dissertation has demonstrated that social workers' engagement with clients is profoundly interwoven with their beliefs, knowledge, and lived experiences of nature and the environment, and vice versa. Phase 1 revealed that although social work survey respondents often expressed ecological concern, these beliefs were not reliable predictors of whether or how they engaged in NBPs. Phase 2 expanded this picture, offering narrative accounts of how NBPs

emerge as relational, adaptive, and situated processes rather than standardized techniques.

Together, the two phases provide the first empirical account in Ontario of how social workers are incorporating nature into practice and what meanings they attach to these engagements.

By grounding theoretical frameworks such as CAS, ecofeminism, and narrative inquiry in the lived practices of social workers, this dissertation bridges abstract theory with applied realities. It affirms that ecological, relational, and multispecies/trans-species ethics are not only conceptually possible but are already being enacted through everyday encounters, narrative practices, and place-based engagements. Attending to intersectionality reveals how race, gender, and privilege shape access to and experience of nature, while silences around species hierarchies expose the persistence of anthropocentrism. Together, these insights call eco-social work to engage both human differences and anti-speciesist commitments in advancing trans-species social justice.

These findings strengthen calls for a paradigmatic shift in social work, one that moves beyond human exceptionalism toward an eco-social, justice-oriented praxis that centres interdependence across species and systems. Such transformation must be ethical, pedagogical, and practical: confronting the colonial, capitalist, and speciesist structures that underlie current models of practice, while cultivating pedagogies, policies, and professional frameworks that support multispecies justice. This study highlights that such change cannot be cosmetic or optional. If social work is to remain relevant and responsive in the face of ecological crisis, it must expand its ethical scope and reimagine its core commitments. This progress includes integrating NBPs as legitimate and supported practice, embedding eco-justice and decolonial frameworks within education, and developing regulatory standards that affirm more-than-human relationality. In doing so, social work does not simply extend its boundaries, it reclaims its

ethical responsibility to address the interwoven crises of social and ecological injustice and affirms its role in shaping a more just, interdependent, and trans-species future.

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Appendix A: Research Ethics & Renewals



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Certificate #:	STU 2021-117
Initial Approval:	09/20/21-09/20/22
Amendments:	
Renewals:	09/01/22-09/01/23 09/18/23-09/18/24
Current Approval Period:	09/18/23-09/18/24

ETHICS RENEWAL

To: Jasmine Ferreira - Graduate Student
Department of Social Work
Faculty of Liberal Arts & Professional Studies

From: Alison M. Collins-Mrakas, Director, Research Ethics
(on behalf of You-ta Chuang, Chair, Human Participants Review Committee)

Date: Monday, September 18, 2023

Title: A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario

Risk Level: ☒ Minimal Risk ☐ More than Minimal Risk

Level of Review: ☒ Delegated Review ☐ Full Committee Review

I am writing to inform you that this research project, "A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario" has received ethics review and renewal by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines.

Note that renewal is granted for one year. Ongoing research – research that extends beyond one year – must be renewed prior to the expiry date.

Any changes to the approved protocol must be reviewed and approved through the amendment process by submission of an amendment application to the HPRC prior to its implementation.

Any adverse or unanticipated events in the research should be reported to the Office of Research ethics (ore@yorku.ca) as soon as possible.

For further information on researcher responsibilities as it pertains to this approved research ethics protocol, please refer to the attached document, "RESEARCH ETHICS: PROCEDURES to ENSURE ONGOING COMPLIANCE".

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: acollins@yorku.ca.

Yours sincerely,

Alison M. Collins-Mrakas M.Sc., LL.M.
Director, Office of Research Ethics

RESEARCH ETHICS: PROCEDURES to ENSURE ONGOING COMPLIANCE

Upon receipt of an ethics approval certificate, researchers are reminded that they are required to ensure that the following measures are undertaken so as to ensure on-going compliance with Senate and TCPS ethics guidelines:

1. **RENEWALS:** Research Ethics Approval certificates are subject to annual renewal. Failure to renew an ethics approval certificate or (to notify ORE that no further research involving human participants will be undertaken) will result in the closure of the protocol. No further research activities may be undertaken until such time as a new protocol has been reviewed and approved. Further, it may result in suspension of research cost fund and access to research funds may be suspended/withheld;
2. **AMENDMENTS:** Amendments must be reviewed and approved **PRIOR** to undertaking/making the proposed amendments to an approved ethics protocol;
3. **END OF PROJECT:** ORE must be notified when a project is complete;
4. **ADVERSE EVENTS:** Adverse events must be reported to ORE as soon as possible;
5. **POST APPROVAL MONITORING:**
 - a. More than minimal risk research may be subject to post approval monitoring as per TCPS guidelines;
 - b. A spot sample of minimal risk research may similarly be subject to Post Approval Monitoring as per TCPS guidelines.

FORMS: As per the above, the following forms relating to on-going research ethics compliance are available on the Research website:

- a. Renewal
- b. Amendment
- c. End of Project
- d. Adverse Event

Appendix B: Permission to Use NEP Scale



DEPARTMENT OF
Sociology

431 Murray
Stillwater, Oklahoma 74078-4069
405-744-6105/6104
Fax 405-744-6780

November 6, 2016

To Whom It May Concern:

I am frequently asked for permission to use the "NEP Scale," despite the fact that both the original 1978 version and the 2000 revision are in the public domain. Therefore, I hereby provide permission for use of the NEP Scale in research for term papers, theses, dissertations, and all other projects, as well as for publication of the NEP scale items in papers, theses, dissertations, reports, articles, books or other publications, in perpetuity. All that I ask in return is proper citation to the correct source for the NEP Scale.

For clarification, I am referring to the NEP Scales reported in these two publications, although I strongly encourage use of the revised version published in 2000:

Riley E. Dunlap and Kent D. Van Liere. 1978. "The 'New Environmental Paradigm': A Proposed Measuring Instrument and Preliminary Results." *Journal of Environmental Education* 9 (4):10-19. [Reprinted in the Fall, 2008 issue of *Journal of Environmental Education* (Vol. 40, No. 1, pp. 19-28) to commemorate the 30th anniversary of publication of the original article.]

Riley E. Dunlap, Kent D. Van Liere, Angela G. Mertig and Robert Emmet Jones. 2000. "Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale." *Journal of Social Issues* 56 (3):425-442.

For information on the development and use of the two scales, you may find the following article of interest:

Riley E. Dunlap. 2008. "The NEP Scale: From Marginality to Worldwide Use." *Journal of Environmental Education* 40 (1):3-18.

If necessary, please print this memo and include it with your thesis or dissertation, or any report where such permission is required.

Sincerely yours,

Riley E. Dunlap
Regents Professor of Sociology

Appendix C: Survey Questions

{Following Agreement to Informed Consent}

Thank you for agreeing to participate in this study. This survey is to gather information related to your personal and professional identity as they relate to the research study.

Nature & Social Work

- 1) Are you a practicing social worker currently registered and in good standing with the College of Social Workers and Social Service Workers (OCSWSSW)?

☐ Yes

☐ No

- 2) Do you consider nature in relation to your professional social work practice?

For the purpose of this survey, nature is defined as “the spectrum of habitats from wilderness areas to farms and gardens. Nature also refers to any single element of the natural environment (such as plants, animals, soil, water, or air), and includes domestic and companion animals as well as cultivated pot plants” (Heinsch, 2012, p.46).

☐ Yes

☐ No

- 3) Do you currently include nature-based activities in direct social work practice with clients?

☐ Yes

☐ No

- 4) If yes, what nature-based activities do you typically include:

☐ Outdoor Activities (i.e. Walking Therapy)

- ☐ Farming
- ☐ Climate Justice Advocacy
- ☐ Gardening
- ☐ Land-based Healing
- ☐ Animal Therapy (AAA, AAI, AAT, Equine)
- ☐ Other: _____

5) If yes, what is your primary reason for including nature in your social work practice?

(Short Answer)

6) If No, why not?

(Short Answer)

7) Is there anything else you would like to share about nature in relation to social work?

(Short Answer)

8) Listed below are statements about the relationship between humans and the environment. For each one, please indicate whether you 1) STRONGLY DISAGREE, 2) MILDLY

DISAGREE, are 3) UNSURE, 4) MILDLY AGREE or 5) STRONGLY AGREE with it.

8-1) We are approaching the limit of the number of people the Earth can support.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-2) Humans have the right to modify the natural environment to suit their needs.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-3) When humans interfere with nature it often produces disastrous consequences.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-4) Human ingenuity will ensure that we do not make the Earth unlivable.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-5) Humans are seriously abusing the environment.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-6) The Earth has plenty of natural resources if we just learn how to develop them.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-7) Plants and animals have as much right as humans to exist.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-8) The balance of nature is strong enough to cope with the impacts of modern industrial nations.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-9) Despite our special abilities, humans are still subject to the laws of nature.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-10) The so-called “ecological crisis” facing humankind has been greatly exaggerated.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-11) The Earth is like a spaceship with very limited room and resources.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-12) Humans were meant to rule over the rest of nature.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-13) The balance of nature is very delicate and easily upset.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-14) Humans will eventually learn enough about how nature works to be able to

control it.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

8-15) If things continue on their present course, we will soon experience a major ecological catastrophe.

(1) Strongly Disagree (2) Mildly Disagree (3) Unsure (4) Mildly Agree (5) Strongly Agree

Your Social Work Practice

9) In what Region of the Province do you practice?

- ☐ Northern Ontario (P postal code)
- ☐ Eastern Ontario (K postal code)
- ☐ City of Toronto (M postal code)
- ☐ South Central Ontario (L postal code)
- ☐ Southwestern Ontario (N postal code)
- ☐ Outside Ontario (please specify)

10) What is your highest social work degree?

- ☐ BSW
- ☐ MSW
- ☐ PhD
- ☐ Other (please specify): _____

11) How many years post social work degree have you been practicing?

- ☐ Less than 1 year
- ☐ 1-9 years
- ☐ 10-19 years
- ☐ More than 20 years

12) What is your primary work setting?

- ☐ Addictions
- ☐ Business/Industry
- ☐ College/University
- ☐ Health-Inpatient
- ☐ Health-Outpatient
- ☐ Court/Justice System
- ☐ Mental Health-Inpatient
- ☐ Mental Health-Outpatient
- ☐ Public Assistance/Welfare
- ☐ Private Practice

- ☐ Residential Facility
- ☐ School Preschool through grade 12
- ☐ Social Service Agency
- ☐ Other (please specify):

13) What client population(s) do you primarily work with:

- ☐ Older Adults
- ☐ Adults (Non-Older Adults)
- ☐ Children
- ☐ Adolescents
- ☐ Communities
- ☐ Families
- ☐ Other (please specify)

14) What is your primary work focus:

- ☐ Addictions
- ☐ Developmental/Other Disabilities
- ☐ Trauma-specific
- ☐ Family Issues

- ☐ Grief/Bereavement
- ☐ Health
- ☐ Individual/Behavioral Problems
- ☐ Abuse
- ☐ Employment Related
- ☐ Violence/Victim Services/VAW shelters
- ☐ Housing/Homelessness
- ☐ Other (please specify): _____

Personal Demographics

15) What is your gender? _____

16) I am in my:

- ☐ 20s
- ☐ 30s
- ☐ 40s
- ☐ 50s
- ☐ 60s
- ☐ 70s

☐ 80s

17) Which of the following best reflects your primary ethnic/racial identity? (Check one)

☐ White

☐ First Nations: NAME

☐ Inuit: NAME

☐ Metis: NAME

☐ South Asian

☐ East Indian

☐ Pakistani

☐ Sri Lankan

☐ Chinese

☐ Black

☐ Indo-Caribbean

☐ Filipino

☐ Latin American

☐ Arab

- ☐ Southeast Asian
- ☐ West Asian
- ☐ Other: _____

18) Do you self-identify as a person with a disability?

Persons with Disabilities: According to definitions from the Government of Canada,

“Persons with disabilities” are persons who have a long-term or recurring physical, mental, sensory, psychiatric, or learning impairment(s).

- ☐ Yes
- ☐ No
- ☐ Prefer to not specify

Opportunity for Further Participation

19) Are you interested in participating in a 1-hour virtual interview with the researcher around your relationship and experience(s) including nature in social work practice?

- ☐ Yes
- ☐ No

20) Are you interested in being entered into a draw to win 1 of 2 \$50 gift certificate for Indigo.ca (Chapters)?

- ☐ Yes
- ☐ No

21) If you selected Yes, for either of the questions above, please provide the following contact details. If you did not indicate a desire to participate in this study further, your contact information will be deleted once the survey has closed and the draw has been completed.

First Name: _____

Last Name: _____

Email: _____

Phone: _____

Thank you for participating!

Appendix D: Recruitment Poster

NATURE, SOCIAL WORK & MENTAL HEALTH

SOCIAL WORKERS NEEDED FOR RESEARCH STUDY





A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario

Are you:

- ✓ Currently a Registered Social Worker (RSW) in Ontario; AND
- ✓ Including nature in direct practice with clients for mental health benefits?

Then you are invited to participate in a confidential and anonymous online survey as part of a thesis research study seeking to better understand if and how social workers are including nature in direct practice with clients.

The survey is expected to take no longer than 5-10 minutes. Your participation is voluntary. In appreciation of your time, participants will have the option of being entered into a draw to win 1 of 2 \$50 gift cards to Indigo.ca (Chapters).

If you are interested in participating in this study or for more information, contact the Principal Investigator, Jasmine Ferreira by email jast@yorku.ca, or ###-####

Participate:
[SimpleSurvey.ca/###](https://www.surveysnap.com/SimpleSurvey.ca/###)

Appendix E: Informed Consent Letter (Survey)

Date: May 30, 2021

Study Name: A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario

Researcher name:

My name is Jasmine Ferreira, I am a Ph.D Candidate in the School of Social Work at York University and the Principal Investigator inviting you to participate in a research study seeking to understand how social workers view or consider nature and the environment in relation to their professional practice. I can be reached at jasf@yorku.ca.

Purpose of the Research:

While there are many articles citing the importance of recognizing the non-human world and issues of ecological justice in social work, very few studies have looked at the experiences and perspectives of social workers. This study hopes to better understand if and how social workers in Ontario are including nature in their practice, while also seeking to understand the meaning of integrating these perspectives or approaches in their work with clients.

The survey findings will provide context for the perspectives of the participants and diverse forms of social work practice. Findings will be presented as part of a Ph.D. Thesis as well as published in peer reviewed journals and presented at relevant conferences. It is the hope that the findings of this study will provide valuable insights into nature-human relationships in social work practice.

What You Will Be Asked to Do in the Research:

This study includes:

- A brief 5-10 minute survey
- The option to participated in a 1-hour virtual interview

The survey will ask some initial questions about if and how you include nature in your social work practice, as well as details about your practice setting and focus. The survey also asks some basic demographic questions about geographic location and an opportunity to share any identity details important to you.

All participants will be given the option to enter a draw to win 1 of 2 \$50 e-gift cards to Indigo.ca (Chapters). Winners will be chosen at random via a random number generator after the interviews are complete. Once the dissertation is completed and accepted, all data will be deleted.

Your contact information will be kept confidential and stored in password protected hardware separate from the data for two years. All data will be kept in password protected hardware for 7 years for analysis and publication.

Risks and Discomforts:

There are no foreseeable risks for participants. Survey questions are designed to collect basic information related to NBPs in social work, and demographic data. For social workers with some knowledge of this field, the study may provide an opportunity to share their understanding and knowledge. For participants who are new to this area of practice, the study will serve as an introduction to the subject and potentially inspire professional growth.

You may recognize my name through my professional role at the Ontario Association of Social Workers (OASW). Please note, this study is part of a dissertation through York University and your decision to participate or not will have no impact on your relationship to OASW.

Benefits of the Research and Benefits to You:

Through participation in this study, you will contribute valuable information about nature and social work practice in Ontario that could potentially benefit the development of policy, social work education, as well as improvements to the social service system.

This research project will also contribute to my completion of a doctoral degree in Social Work.

Voluntary Participation and Withdrawal:

Your participation in this study is voluntary and you may choose to stop participating at any time. You can skip questions if you wish. Your decision not to volunteer, to stop participating, or to refuse to answer particular questions will not influence the nature of the ongoing relationship you may have with the researchers or study staff, or the nature of your relationship with York University either now, or in the future.

Your survey responses will be anonymous, as your name will not be known to anyone or used. Individual responses will be coded and aggregated. The aggregated survey results of this study will not include any names. Only anonymous results will be used in reports, presentations, and/or publications. Thus, any information you will share in the survey will be confidential.

If you decide to stop participating, you may withdraw without penalty, financial or otherwise, and you will still receive the promised inducement.

In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible. Should you wish to withdraw after the study, you will have the option to also withdraw your data up until the analysis is complete.

Confidentiality:

- Unless you choose otherwise all information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research.
- Data will be collected via survey (Simple Survey), digital and handwritten notes. All digital data will be safely stored on a password protected hard drive. Hard copy data will be safely stored in a locked cabinet. Only the researcher and thesis committee will have access to this information.
- The data will be stored for no more than 7 years, after which it will be destroyed and deleted. Therefore, all data will therefore be erased by September 2028.
- Confidentiality will be provided to the fullest extent possible by law.
- The data collected in this research project may be used – in an anonymized form - by the researcher in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any secondary use of anonymized data by the researcher will be treated with the same degree of confidentiality and anonymity as in the original research project.
- The researcher(s) acknowledge that the host of the online survey, Simple Survey, may automatically collect participant data without their knowledge (i.e., IP addresses).

Although this information may be provided or made accessible to the researchers, it will not be used or saved without participant's consent on the researchers system. Further, Because this project employs e-based collection techniques, data may be subject to access by third parties as a result of various security legislation now in place in many countries and thus *the confidentiality and privacy of data cannot be guaranteed during web-based transmission.*

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me at jasf@yorku.ca or my supervisor, Dr. Atsuko Matsuoka at atsukom@yorku.ca and/or (416)-736-2100 Ext: 22851. You may also contact the Graduate Program in Social Work at gradsowk@yorku.ca and/or (416) 736-2100 + ext. 55226

This research has received ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Consent to Participate:

By checking the box below, you are giving your consent to participate in the survey: A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario, conducted by Jasmine Ferreira.

- ☐ I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. Checking this box indicates my consent.
- ☐ I do not consent (Survey Ends).

Appendix F: Narrative Interview Topics

Interview questions will be informed by survey findings, as well as adapted during the interview to account for themes and issues as they emerge as adapted from Toohey et al. (2017):

- Description of social work activities, scope of practice, and organizational setting
- Theoretical orientation or social work perspective
- Description of clients and services provided
- Meaning of the image (artifact) you choose to bring to the interview
- Regularity with which nature is included in practice, and descriptions of such situations
- General views on inclusion of nature-based practice in social work, including personal reasons for inclusion and perceived value
- Perspectives on nature and the environment within the social work profession
- Personal experiences with nature
- Future directions for social work research, education, practice

Appendix G: Email Communications with Interview Participants

1) *Scheduling Email:*

To be sent to participants that indicate an interest in a follow-up interview:

“Hi _____

I hope that this email finds you well. My name is Jasmine Ferreira and I am a doctoral candidate in the Social Work Ph.D program at York University. I am the sole researcher on this study: A Critical Exploration of Nature and the Environment Among Social Workers in Ontario.

You are receiving this email because you recently completed a survey and indicated an interest in participating in a 60-minute virtual interview on nature-based practices in social work. Your responses are valued, and all interview participants will receive a \$25 e-gift card to Tim Hortons.

For more information on this research study, I have attached some additional documents including a poster and letter. You can also contact my supervisor at the York University, Dr. Atsuko Matsuoka, by email atsukom@yorku.ca at or telephone number (416)-736-2100 Ext: 22851. *This project has received ethics approval from the York University Research Ethics Committee.*

If you are still interested in participating, please provide your availability/preferred times for the next few weeks and I can schedule a time for the interview that is most convenient for you. If you have any questions or concerns, please let me know. I look forward to hearing from you,

Sincerely,

Jasmine”

2) *Interview Confirmation Email:*

To participants that reply with their availability:

“Dear NAME,

Thank you for your response. I am confirming our interview for DATE @ TIME. I will send you a calendar invitation shortly that will include a link to access the meeting. Please review the attached participant information letter and consent form. I have 3 options for you to indicate your consent to participate:

- (1) E-signature or digital signature (i.e. using Adobe software).
- (2) Print the consent form and scan a signed copy.
- (3) If you do not have access to a scanner, print the consent form and take a digital photo of the signed copy.

I must receive a signed consent form prior to the interview taking place. A few days before our meeting I will send you a reminder email with additional information about the interview platform. If you have any concerns or questions, please let me know.

I look forward to meeting you,

Jasmine”

After Informed Consent Form is Received

Note: As soon as consent form is received, a participant will be sent an \$25 e-gift card to Tim Hortons, regardless of whether they continue with the study:

“Hi _____,

Thank you again for your willingness to participate in this study. Understanding that our time is limited, I have attached the questions that you will be asked. You are also asked to bring

an image-based artifact (i.e. photo, art) that represents your relationship or experience of including nature in your social work practice.

As a reminder, with your consent to participate, the interview will be audio and video recorded. For the interview platform, I will be using GoToMeeting. In case you are not familiar with this platform, please note the following for optimal use:

- Although the program will work on any browser, the program works best on Google Chrome
- If you have not already used GoToMeeting, you will need to download it onto your computer. This may only take a few minutes depending on your downloading speed.

For the meeting link, we have found that GoToMeeting links are time-sensitive regarding the recording function. Please expect the link a few minutes just before our meeting.

If you have any questions or concerns, please let me know.

Sincerely,

Jasmine”

3) *After Interview is completed:*

“Hi _____,

Thank you again for your participation in today’s interview. Once I have identified key themes in the next 2-3 months, I will invite you to provide feedback on key themes. This future opportunity for participation is completely voluntary. If you have any questions or concerns, please let me know.

Sincerely,

Jasmine”

4) *After key themes have been identified:*

“Hi _____,

Thank you again for participation in an interview for my study on: A Critical Exploration of Nature and Mental Health Among Social Workers in Ontario. Please see attached for key themes I have identified based on several interviews including yours. You are invited to give feedback on them via email, phone, or GoToWebinar at your earliest convenience. Please note this is voluntary and you are not required to participate further. If you are interested, please respond within 2-weeks. If you prefer phone or Webinar, please provide a preferred date and time. If you have any questions or concerns, please let me know.

Sincerely,

Jasmine”

Appendix H: Informed Consent Letter (Interview)

Date: November 1, 2021

Study Name: A Critical Exploration of Nature and the Environment Among Social Workers in Ontario

Researcher name:

My name is Jasmine Ferreira, I am a Ph.D Candidate in the School of Social Work at York University and the Principal Investigator inviting you to participate in a research study seeking to understand how social workers view or consider nature and the environment in relation to their professional practice. I can be reached at jasf@yorku.ca.

Purpose of the Research:

While there are many articles citing the importance of recognizing the non-human world and issues of ecological justice in social work, very few studies have looked at the experiences and perspectives of social workers. This study aims to better understand if and how social workers are including nature in their practice, while also seeking to understand the meaning of integrating these perspectives or approaches in their work with clients. It is the hope that this study will contribute to increased understanding of nature-human relationships in social work practice. The study includes:

- A 1-hour virtual interview

The interview will ask questions about if and how you include nature in your social work practice, as well as what meaning these practices have for in your professional practice.

Interviews will be conducting using a narrative research approach. Once key themes are identified (2-3 months later), you will be invited to voluntarily give feedback on them via email, phone or GoToWebinar. The results of the research will be presented as a Ph.D. thesis as a partial

requirement of the degree as well as published in peer reviewed journals and presented at relevant conferences as efforts to disseminate the learning from the participants of the study.

What You Will Be Asked to Do in the Research:

Your participation in this study is voluntary and will be kept entirely confidential. You can decline answering any and all questions. If you choose not to participate or to withdraw from the study at any time, there will be no negative consequences from York University. Your responses will be anonymous, as your name will not be known to anyone or used. Individual responses will be coded and aggregated. The aggregated thematic results of this study will not include any names. Only anonymous results will be used in reports, presentations, and/or publications. Thus, any information you will share will be confidential.

If you agree to participate in the study, you will be asked to share your experiences and perspectives on inclusion of nature in social work practice with clients. The interview will take place virtually for approximately 50-60 minutes. Interviews will be conducted through GoToMeeting which has end-to-end encryption and includes privacy and security features such as Transport Layer Security encryption in transit, AES-256-bit encryption at rest of cloud recordings, transcriptions, and meeting notes, and TRUSTeVerified Privacy. The interview will be video and audio recorded. These recordings will be used for analysis with all identifiers removed. A coding system will be used to ensure that all information provided is treated in a confidential manner, with anonymity maintained throughout the study. All participants will receive a \$25 gift card to Tim Hortons.

Once the dissertation is completed and accepted, all data will be deleted, except for those participants who consent to keep the information for the purposes of being contacted for follow-up research on nature and social work.

Your contact information will be kept confidential and stored in password protected hardware separate from the data for two years. All data will be kept in password protected hardware for 7 years for analysis and publication.

Risks and Discomforts:

There are no foreseeable risks for participants. Survey questions are designed to collect basic information related to nature-based practices in social work, and demographic data. For social workers with some knowledge of this topic, the study may provide an opportunity to share their understanding and knowledge. For participants who are newer to this area of practice, the study will serve as an introduction to the subject and potentially inspire professional development.

You may recognize my name through my professional role at the Ontario Association of Social Workers (OASW). Please note, this study is part of a dissertation through York University and your decision to participate or not will have no impact on your relationship to OASW.

Benefits of the Research and Benefits to You:

Through participation in this study, you will help build valuable information about nature and social work practice in Ontario that could potentially benefit the formation of agency policies, public policy, social work curricula, as well as improvements to the social service system.

This research project will contribute to my completion of a doctoral degree in Social Work Practice.

Voluntary Participation and Withdrawal:

Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer, to stop participating, or to refuse to

answer particular questions will not influence the nature of the ongoing relationship you may have with the researchers or study staff, or the nature of your relationship with York University either now, or in the future.

If you decide to stop participating, you may withdraw without penalty, financial or otherwise, and you will still receive the promised inducement.

In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible. Should you wish to withdraw after the study, you will have the option to also withdraw your data up until the analysis is complete.

Confidentiality:

- Unless you choose otherwise, all information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research.
- Data will be collected via audio and video recording (GoToWebinar), digital and handwritten notes. All digital data will be safely stored on a password protected hard drive. Hard copy data will be safely stored in a locked cabinet. Only the researcher and thesis committee will have access to this information.
- The data will be stored for no more than 7 years, after which it will be destroyed and deleted. Therefore, all data will therefore be erased by September 2028.
- Confidentiality will be provided to the fullest extent possible by law.
- The data collected in this research project may be used – in an anonymized form - by the researcher in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any

secondary use of anonymized data by the researcher will be treated with the same degree of confidentiality and anonymity as in the original research project.

- The researcher(s) acknowledge that the host of the online survey, Simple Survey, may automatically collect participant data without their knowledge (i.e., IP addresses).

Although this information may be provided or made accessible to the researchers, it will not be used or saved without participant's consent on the researchers system. Further, Because this project employs e-based collection techniques, data may be subject to access by third parties as a result of various security legislation now in place in many countries and thus *the confidentiality and privacy of data cannot be guaranteed during web-based transmission.*

Questions About the Research?

If you have questions about the research in general or about your role in the study, please feel free to contact me at jasf@yorku.ca or my supervisor, Dr. Atsuko Matsuoka at

atsukom@yorku.ca and/or (416)-736-2100 Ext: 22851. You may also contact the Graduate Program in Social Work at gradsowk@yorku.ca and/or (416) 736-2100 + ext. 55226

This research has received ethics review and approval by the Delegated Ethics Review Committee, which is delegated authority to review research ethics protocols by the Human Participants Review Sub-Committee, York University's Ethics Review Board, and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

Legal Rights and Signatures:

I _____ consent to participate in: A Critical Exploration of Nature and the Environment Among Social Workers in Ontario, conducted by Jasmine Ferreira. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

_____ **Date**
Participant

_____ **Date**
Principal Investigator

Additional consent (where applicable)**1. Audio recording**

☐ I consent to the audio-recording of my interview(s).

2. Video recording

I _____ consent to the use of images of me (including photographs, video and other moving images), my environment and property in the following ways (please check all that apply):

In academic articles [] Yes [] No

In print, digital and slide form [] Yes [] No

In academic presentations

☐ Yes

☐ No

In media

☐ Yes

☐ No

In thesis materials

☐ Yes

☐ No

Signature:

Date:

Participant: (name)

Verbal Consent Script (Interview)

The following script was read at the beginning of each virtual Narrative Interview to ensure ongoing informed consent:

“Thank you for agreeing to participate. Before we begin, I would like to remind you that your participation in this study is voluntary and will be kept entirely confidential. You can decline answering any and all questions. If you choose not to participate or to withdraw from the study at any time, there will be no negative consequences from York University. Your responses will be anonymous, and your name will not be known to anyone or used.”

Appendix I: Descriptive Statistics from Survey

Table I1

Survey Demographics & Descriptive Statistics for Gender, Age, and Ethnic/Racial Identity

Demographic		<i>n</i>	%
Gender <i>n</i> = 48	Woman	35	72.9
	Man	11	22.9
	Non-Binary	1	2.1
	Fluid	1	2.1
Age <i>n</i> = 60	20s	4	6.7
	30s	18	30.0
	40s	17	28.3
	50s	13	21.7
	60s	6	10.0
	70s	2	3.3
Primary racial/ethnic identity <i>n</i> = 60	White	44	73.3
	South Asian, East Indian or Sri Lankan	7	11.7
	First Nations or Metis	5	8.3
	Jewish	2	3.3
	Indo-Caribbean	1	1.7
	Other	1	1.7
Persons with a disability <i>n</i> = 55	No	45	81.8
	Yes	10	18.2

Table I2

Survey Demographics & Descriptive Statistics for Geographic Location, Highest Social Work Degree, and Years of Practice Post-Social Work Degree

	Demographic	<i>n</i>	%
Geographic location <i>N</i> = 59	Southwestern Ontario (N postal code)	17	28.8
	South central Ontario (L postal code)	16	27.1
	City of Toronto (M postal code)	10	16.9
	Eastern Ontario (K postal code)	9	15.3
	Northern Ontario (P postal code)	7	11.9
Highest social work degree <i>N</i> = 60	MSW	55	91.7
	BSW	4	6.7
	PhD	1	1.7
Years of practice post social work degree <i>N</i> = 60	9 Years or Less	26	43.3
	10-19 Years	14	23.3
	20 Years or more	20	33.3

Note. MSW = master of social work; BSW = bachelor of social work; PhD = doctor of

philosophy.

Table I3*Survey Demographics & Descriptive Statistics for Primary Work Setting, Focus, and Client**Population*

	Demographic	<i>n</i>	%
Primary work setting <i>N</i> = 60	Private practice	22	36.7
	Mental health (outpatient or inpatient)	17	28.3
	Health (outpatient or inpatient)	9	15.0
	Community or social service agency	5	8.3
	School - preschool through Grade 12	4	6.7
	College/university	2	3.3
	Addictions	1	1.7
	Trauma-specific	15	25.0
Primary work focus <i>N</i> = 60	Individual/behavioural problems	12	20.0
	Mental health	9	15.0
	Health	9	15.0
	Family issues	4	6.7
	Addictions	4	6.7
	Combination/generalist	4	6.7
	Developmental/other disabilities	2	3.3
	Grief/bereavement	1	1.7
Client populations ^a <i>N</i> = 61	Adults (non-older adults)	50	82.0
	Adolescents	27	44.3
	Older adults	19	31.1
	Children	17	27.9
	Families	15	24.6
	Communities	8	13.1
	Other	3	4.9

^a Respondents were able to select more than one answer to this question.

Appendix J: Additional Interview Participant Details

Amin trained as a social worker in India, working in child welfare, hunger, gender-based organizing, and rural communities. After immigrating to Canada, he practiced in child welfare and a community health center. He describes his approach as grassroots and research-oriented, drawing on Marxism, feminist theories, Freire, critical social work, and Ambedkarite philosophy.

Maya works in outpatient mental health in a hospital and previously worked in inpatient care. Her experience includes community and social justice work in shelters addressing gender-based violence and housing, as well as school settings with Indigenous youth across Canada. Before her social work career, she advocated for women's entrepreneurship in Ecuador. Her theoretical orientation includes systems theory, family systems, social-ecological, and anti-oppressive approaches.

Tracy runs a private psychotherapy practice primarily outdoors and conducts research using discourse analysis. Her lived experiences with psychiatric and psychotherapy systems shape her social work and healing journey. Having grown up with access to nature, she maintains a strong connection to it and practices unschooling with her children through a forest-school community.

Camille is a Francophone social worker with an interest in Eco-Social Work. She runs a forest-based biking program and integrates yoga into her practice. Her social work experience includes psychiatric care, community health, and youth justice in New Zealand. Growing up immersed in nature, she was deeply influenced by ecology and conservation. Her passion for integrating nature into social work solidified after losing a family member to suicide, inspired by his love of the outdoors.

Alex works in a rural, nurse-practitioner-led clinic providing mental health support and psychotherapy to clients aged 11-79, including hidden Indigenous populations. Their connection to nature is influenced by their rural setting and experience with art therapy.

Joseph runs a full-time private practice, consults with a family health team and victim services, and primarily works with adults. His eclectic approach includes CBT, DBT, and ACT, tailored to client needs. His foundational experience in the Northwest Territories, working with Indigenous communities, deepened his connection to nature-based care. A lifelong "nature person," he has also trained in Shinrin-Yoku (Forest Bathing).

Ruth has spent most of her career in dementia care, including residential and community programs, while also managing frontline cases, some spanning decades. Her background includes gerontology in long-term care, with an eclectic theoretical approach emphasizing solution-focused, psychosocial, and family systems theories, along with narrative therapy. Inspired by her family's experiences, she integrates nature into care, recognizing its positive impact on dementia and mental well-being.

Faye works in a non-profit setting supporting youth and children with caregiving responsibilities and has a private practice focused on eating disorders. Their lived experience as a young person led them to their social work career and current role.

Ashley runs a part-time psychotherapy practice and has experience in community psychiatry, an Indigenous treatment center, teaching social work, hospital settings, and hospice care. She continues to work with her local Indigenous community and practices in a primarily rural area, blending structural social work and systems theory.

Haider teaches social work and provides clinical supervision in private practice. His experience spans outreach, crisis intervention, child welfare, and work with an Indigenous

community. He integrates various approaches, including community-based, narrative, family systems, Gestalt, critical theory, anti-oppressive, anti-racist, and radical social work.

Lisa works in a hospital renal program and previously served on crisis mental health teams in the community. She values nature deeply, especially during the pandemic, and approaches care with a strength-based perspective, contrasting with the Western medical model of her workplace.

Olivia works in a primary school with children up to grade six. Her background includes Violence Against Women (VAW), an ACT mental health team, and supporting individuals with diabetes. She follows a person-centred approach, serving a largely rural, industrial, and Francophone community.

James provides psychotherapy to individuals, groups, and families in a children's mental health setting. He also runs an adult-focused private practice integrating eco-social work, serving a primarily rural community.

Susan is a social work educator, researcher, and practitioner specializing in family and group work. Her background includes youth work, GBV, trauma, Employee Assistant Programs (EAP), and child protection. Currently, she focuses on somatic therapy and talk therapy alternatives. Passionate about nature, Susan enjoys canoeing, kayaking, and camping as part of her self-care.

Emily runs a private practice, previously working in children's mental health, addictions, and adult mental health. She collaborates closely with local Indigenous communities, emphasizing cultural humility as a White settler. Her trauma-focused support integrates EMDR with an Indigenous perspective.