

Lived Experiences of the Trails: Perspectives from Three Southwestern Ontario Trail Organizations

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

The purpose of this qualitative thesis is to describe the common elements of sense of place in the lived experiences of volunteer trail managers. Through a triangulation of data gathered from secondary research, interviews with trail managers, and participation observation of hikers, I sought to draw out the essence of the trail manager's sense of place towards their trail experience and connect this back to ongoing management challenges in the organization. Some of these challenges include declining membership, limited lines of communication, and problematic landowner relations. Themes around this common sense of place are situated within meanings, relationship/ attachments, emotions, and behaviors towards the trail experience. Interrelationships between sense of place, phenomenology, and trail management are also highlighted.

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Table of Contents

AUTHOR'S DECLARATION.....	ii
Abstract.....	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures.....	viii
List of Tables.....	ix
Chapter 1 Introduction: A Tale of Three Trails.....	1
1.1 Memories of my First Hike.....	1
1.2 Research Overview and Purpose.....	2
1.3 Intended Audience and Outcomes of the Research.....	4
1.4 Boundaries for the Research Project.....	5
1.5 Research Questions.....	7
1.6 Case Study Organizations.....	8
1.6.1 Thames Valley Trail Association (TVTA).....	8
1.6.2 Grand Valley Trail Association (GVTA).....	10
1.6.3 Avon Trail Association (ATA).....	11
1.7 Summary.....	12
Chapter 2 Literature Review: Trail Management and Sense of Place on the Trails.....	13
2.1 A Clear Perspective.....	13
2.2 An Overview of the Literature.....	13
2.3 Trail Management – Challenges, Opportunities, and Managerial Action.....	14
2.3.1 Challenges in Managing the Trail Experience.....	15
2.3.2 Opportunities in Trail Management.....	20
2.3.3 Trail User Perspectives and Trail Management Plans.....	21
2.3.4 Volunteer Commitment and Retention in Trail Organizations.....	23
2.3.5 Satisfaction with Hiking Experiences and Connections to Management.....	25
2.4 Sense of Place and the Trail User.....	26
2.4.1 Areas of Research in Sense of Place.....	27
2.4.2 Cultural Influences on Sense of Place.....	36
2.4.3 People and Place: A Joint Evolution?.....	39

2.5 Summary	40
Chapter 3 Methodology: A View of the Three Trails	41
3.1 A Trail Experience from the Researcher’s Perspective	41
3.2 Methodological Choices for the Research	41
3.3 Evolution of Phenomenology	43
3.3.1 Husserlian versus Heideggerian Influences.....	45
3.4 Methods: What, Why, and How	48
3.4.1 Participation Observation	50
3.4.2 Interviews with Trail Managers.....	51
3.5 Limitations in the Field	54
3.6 Analysis: Steps Taken in the Creation of Meaning.....	55
3.7 Summary	59
Chapter 4 Results: A Collection of Themes on the Three Trails	60
4.1 The Participant’s Voice	60
4.2 Stories from the Trails: A Trail Manager’s Perspective	60
4.3 Meaning Attributed to the Trail Experience	62
4.3.1 Importance of the local to involvement in the trail organization	62
4.3.2 Opportunities for social recreation in nature	64
4.3.3 Opportunities for environmental appreciation.....	66
4.3.4 Freedom in hiking.....	67
4.4 Connection and Relationship to Trail Experience	68
4.4.1 Feelings of possession towards the trail environment	68
4.4.2 Sharing/shared love of nature	69
4.4.3 “Us/Insiders” versus “Them/Outsiders”	72
4.4.4 It feels good to achieve my goals	78
4.4.5 It feels good to help out.....	80
4.5 Management Activities and Challenges.....	81
4.5.1 Signs as meaning-making entities.....	81
4.5.2 Communication with other stakeholders as barrier	84
4.5.3 Empty roles and limited membership.....	88
4.5.4 Desire for partnerships with other organizations	89

4.5.5 Fear of bureaucracy creates avoidance	91
4.5.6 Rule-adherence as solution to problem(s).....	95
4.5.7 Long-term sustainability of the trail organization.....	97
4.6 Behaviors and Emotions towards the Trail Experience.....	98
4.6.1 Alternative methods of trail management.....	99
4.6.2 Catering to specific volunteer views	101
4.7 Summary.....	103
Chapter 5 Discussion: The Story from my Hikes	104
5.1 Discussion: Implications of the Interview Themes	113
5.1.1 How does the volunteer trail manager perceive the trail should be used by stakeholders?.....	113
5.1.2 What does the volunteer think about their trail experience? What are their emotions towards the trail experience?	115
5.1.3 What aspects of the trail manager’s identity are based out of their trail experience?	116
5.1.4 Do conflicts result from differences between people in how the trail is perceived, valued, and used? If conflicts do exist, how do these issues impact trail management?	120
Chapter 6 Conclusions: A Sense of Place within Trail Management	126
Appendix A Participation Observation Questions	133
Appendix B Self-Reflexive Commentary – Participation Observation Hikes.....	134
Appendix C Organizational Chart for Participation Observation Notes	135
Appendix D Interview Questions.....	136
Appendix E Excerpt of Extracted Significant Statements	137
Appendix F Excerpt of Meanings of Significant Statements.....	138
References	139

List of Figures

Figure 1. <i>Map of the location and connections between the three trails under study</i>	9
Figure 2. <i>Topics and sub-topics covered in this literature review</i>	14

List of Tables

Table 1. <i>Variables and Associated Elements Contributing to a Satisfactory Trail Experience</i>	26
Table 2. <i>Historical Phases of Phenomenology</i>	44
Table 3. <i>Type/Volume of Data, Method of Analysis, and Participant Characteristics</i>	49
Table 4: <i>Clustered Themes from Analysis</i>	58
Table 5. <i>Themes and Sub-Themes from the Analysis</i>	61

Chapter 1

Introduction: A Tale of Three Trails

1.1 Memories of my First Hike

First Sign.

Standing at the head of the trail, there is a buzz of activity around me as the other hikers pack water bottles, tie boot strings, and affix backpack straps. I am astounded at how enthusiastic they are, and at the volume of cheerful chatter and happy banter that they exchange with the Hike Leader. I feel vaguely out of place; this is my first official group hike with the trail organization, and I am only present because of my research.

I peer inquisitively at the beaming faces of the hikers, wondering what they are thinking about and whether they are prepared for the intense heat of the day, the mosquitoes, and the steep hills. I do not see my own sense of uncertainty reflected in anyone else's visage, as the majority of them say 'hello' and greet me by name. They know me because I have volunteered with their organization for years. However, my interaction with them has never extended onto the actual trails, and I try – without success – to determine how many of them I have seen in the official Board room in the past. I begin to wonder; how many of the volunteers responsible for the management of these trail organizations are also hikers and vice-versa? What do they value along the trail environment? Does a part of their self-identity rest on their involvement in this social group?

With these and other questions in mind, I embarked on my research journey. With time this journey evolved into an analogy for a hiking experience; I encountered blockages and had to creatively find ways around them, I had to traverse slippery and uncertain paths, and I had to read and follow the directional signs. Consequently, the 'sign' analogy will greet and guide the reader at the beginning of each chapter leading up to the cumulative narrative in my discussion section.

1.2 Research Overview and Purpose

The province of Ontario, Canada, has an extensive trail system of about 64,000 kilometers of trail on both public and private land (Ministry of Health Promotion [MHP], 2005, pg. 6). Over 600 diverse trail organizations exist to build, maintain, and promote these trail systems as community, recreational, and tourism assets (MHP, 2005, pg. 22). Each trail organization operates at the local level to ensure their trail remains attractive, accessible, and well-maintained for residents living in both rural and urban landscapes (Bullock & Lawson, 2008; Hike Ontario, 2010; Hull & Stewart, 1995). Policy development, government relations, and long-term planning for trails in Ontario are mandates of provincial-level organizations such as Hike Ontario (2007).

Although there are many types of trail groups and trail uses across Ontario, this thesis focuses on hiking trails and three volunteer-run, non-profit hiking organizations – the Thames Valley Trail Association (TVTA), the Grand Valley Trail Association (GVTA), and the Avon Trail Association (ATA). When these three organizations were founded, member efforts focused on getting permission to hike across private land and design a tangible, marked trail across this landscape. More recently, there has been less focus on expanding the trail and more effort invested into keeping the existing trails open to hikers through communication with public and private landowners (Chauvin, 1997).

The provision of hiking opportunities is the primary goal for these trail organizations, though they also maintain and manage a physical trail. Consequently, community recreation is their first mandate with environmental stewardship as a secondary goal to be completed in partnership situations. This sentiment is encapsulated in the guidebook of the GVTA (2009): “The purpose of the association is to engage in and promote year-round hiking, recreation, physical fitness” along with the “conservation and preservation of wildlife, ecology, and natural resources in cooperation with other organizations” (pg. 1). However, academic research suggests that trails provide not only

recreational opportunities (Marsh & MacPherson, 2008), but also the opportunity for local communities to learn about the environment (Chhetri, Arrowsmith & Jackson, 2004), and become actively involved in preserving features of the natural environment (Lee, 2011).

In response to the priorities of the trail organizations, this thesis attempts to describe the common elements of sense of place in the lived, daily experiences of volunteer trail managers. 'Common' elements were investigated to identify the core values that trail managers, as a group, ascribe to their local trail. This research is important because volunteer trail organizations must balance recreational use of the trails with environmental conservation to keep these landscapes viable, but are often at a loss for achieving these dual management goals with limited volunteer resources. A connection to the trail environment, developed individually or in communion with others, is needed to motivate and sustain volunteers (Bruyere & Rappe, 2007; Ryan, Kaplan, & Grese, 2001). Reduced volunteer membership threatens the existence of the physical trail as a community resource; without people to maintain and advocate for a trail on public and privately-held land, it may become inaccessible due to lack of maintenance or removal of landowner permissions.

Volunteers involved in the trail organizations have a variety of roles, ranging from Trail Captain to Website Administrator. Despite this diversity in administrative titles, every individual member ascribes certain meanings to the trail and its organization, which influences their emotions and behaviors as a volunteer (Spartz & Shaw, 2011). Each volunteer has also been forced to take on more tasks as membership levels, and concomitant volunteer assistance, drop. These and other major management challenges force the volunteer trail managers to come together and critically evaluate the personal and societal implications of their organization and its trail.

As I conducted interviews and participated in a variety of hikes with the three trail organizations, I used phenomenological techniques based on Colaizzi's (1978) work to examine the

resulting mass of data. Themes developed and evolved to highlight significant trail experiences in the life of the volunteer. By examining these themes holistically and with awareness of my personal preconceptions, I identified important values and related value conflicts surrounding the trail experience. A narrative segment of this thesis, initiated by the common themes and written from my own viewpoint, allows the reader to draw out their own conclusions around the essence of the trail manager's experience of the trails (Pinn, 2001; van Manen, 1990). This thesis contributes to the literature on volunteer management of environmental resources, and the related challenges for these organizations, within the context of recreational hiking trails.

1.3 Intended Audience and Outcomes of the Research

Given the descriptive nature of this research, its primary value is in inciting discussion around the value of trails as environmental, community, and tourism resources. Theoretical contributions of the research will also be highlighted here. Natural area managers involved in parks, conversation authorities, or trail networks in other contexts may think about the human-ecosystems interrelationship differently after reading this thesis. Rather than evaluating management regimes as contributing to types and volumes of trail use, I evaluate trail managers as local stakeholders who are attempting to engage in bottom-up management activities. Trail managers have some control over the trail as a natural resource and develop feelings of possession towards this landscape, emphasizing the importance of human-nature relationships in natural resource management (Williams & Stewart, 1998). However, in some areas the dominant public or private owner of the land dictates resource management activities and this generates conflicts around the perceived uses of that landscape (i.e. the politics of place) (Williams & Stewart, 1998).

Trails also form important community resources (Schasberger, et al. 2009). Studies tend to focus on settings such as urban or wilderness parks when evaluating natural resource management

(e.g. Chon & Shafer, 2009), and place-based research has often identified the connections between people and urban environments (e.g. Naoi, et al. 2011). This research investigates sense of place and environmental management in the context of recreational trails which span across both urban/rural and public/private landscapes. I also solidify answers to the 'who, what, why, and how' questions for trail organizations; i.e. who presently works on the trails? Why did they join the organization? What meaning do they ascribe to the trails? How can the trail organization grow into the future? Knowing the answers to these questions can detail why people give their volunteer, financial, and political support to the trails. These questions also provide insight on how to support the continued functioning of trail organizations as valuable community assets (Kruger, 2006).

Lastly, tourism benefits when a destination has attractive, natural, and open space available for the visitor's use (Fennell, 1999). Tourism managers may find their interest piqued by this research; partnering with volunteer-run trail organizations or promoting volunteer tourism around trail systems could further enhance the trail as a community resource (Fennell, 1999). I will also identify how tourism could be beneficial for trail organizations. In particular, arguing that trails have economic value as tourism assets could encourage governments to provide tax and other financial incentives to landowners for opening their land to the general public.

The central theoretical contribution of this research is in the pairing of sense of place and phenomenology. Lewicka (2011) expresses concerns that research into sense of place does not follow with any coherent focus or methodology. I present in this thesis some of the challenges and benefits of using phenomenology to examine the complexity of human ties to natural landscapes.

1.4 Boundaries for the Research Project

Boundaries for this research project are based around the experiences of small, local trail organizations and their trails. Trail organizations are defined here as independent, not-for-profit

groups operated primarily by volunteers. This definition does not include municipalities, conservation authorities, Friends groups, or naturalist groups. Trails are defined here as formal paths located on public and private land which are created and managed by volunteers in partnership with the dominant management authority. These trails are open for general public use, occasionally unmarked by signs, and outlined primarily in the trail organization's guidebook maps' (Bullock & Lawson, 2008; Hike Ontario, 2007). Although the *Ontario Trails Strategy* defines trails as catering to a wide variety of potential uses, this study does not consider trails involving motorized vehicles, hiking paths converted from abandoned railway lines, or trails focused specifically around tourism attractions (MHP, 2005, pg. 6).

Interpersonal dynamics within the trail organizations define social and trail management-related activities, making individual group members the focus of this research. General stakeholders and partner groups to the trail organizations were not included. Anyone might be a stakeholder along the trail, including people who are or might be impacted by a decision relating to the trail environment (e.g. a local landowner, businesses, etc.) (Hacking, Barratt, & Scott, 2007). These perspectives were not included because the number of possible stakeholders surrounding the trail is quite vast, and relations between the trail groups and private landowners are already quite strained in some cases (Chauvin, 1997). Not including these diverse perspectives limits this thesis by relegating alternative attitudes towards the trail experience into the background. Future research might be conducted on these stakeholders to improve understanding of the complexity surrounding volunteer managed socio-environmental resources.

Partner groups on the trails were also not included, for the same reasons as above. These partners include the provincial and municipal government, conservation authorities, and private businesses. Provincial levels of government enact natural resources legislation, while municipalities establish the legal context for the trail's operations through Official Plans and By-Laws (Ministry of

Health Promotion [MHP], 2005). Conservation authorities work in tandem with municipalities to create land use plans in the areas surrounding the trails (MHP, 2005). Private businesses also contribute to trail management by providing financial, personnel, and in-kind resources to trail maintenance; for example, Union Gas has provided grant and personnel resources to develop new trails in the past (GVTA, 2009; MHP, 2005). In the following section, I identify what questions I asked to evaluate my central research question.

1.5 Research Questions

The central purpose of this research, to describe the common elements of sense of place in the lived experiences of volunteer trail managers, was supported by a variety of sub-questions during data collection. Each question was investigated through interviews with trail managers and participation observation of their hiking experiences. Please note that because of the close relationship between the trail and trail organization, I consider these two concepts to be inseparable for the volunteer and thus comprise the overall *trail experience*.

Research questions are as follows:

1. How do volunteer trail managers perceive the trail should be used by stakeholders?
2. What do volunteers think about their trail experience? What is their emotional connection to the trail experience?
3. How do volunteer trail managers describe their identity in relation to the trail experience?
4. Do conflicts result from differences between people in how the trail is perceived, valued, and used? If conflicts do exist, how do these issues impact trail management?
5. How might sense of place help to overcome differences in how people perceive, value, and use the trail?

1.6 Case Study Organizations

Figure 1 represents the locations of the three trail organizations selected for this research – the GVTA, TVTA, and Avon Trail. A section describing each of the three trail organizations analyzed in this research is subsequently provided. Management regimes used by each organization follow the examples provided by the Appalachian Trail Conservancy and Bruce Trail Conservancy, two of the oldest trail organizations in North America (MHP, 2005).

1.6.1 Thames Valley Trail Association (TVTA)

The Thames Valley Trail (TVT), located in and around London, Ontario, follows the Thames River for a total of 110 kilometres of hiking trail (Thames Valley Trail Association [TVTA], 2008). On this trail, hikers can expect to see farmland, multi-use pathways within urban centres, conservation lands, river valleys, and floodplains (TVTA, 2008). Aside from the distinguishing features of the ecosystem, this trail is comprised of one-third private lands (TVTA, 2008). There is thus a strong focus on respecting the rights of landowners within the organization (TVTA, 2008).

The TVTA developed in response to the deliberations of the London Chamber of Commerce, which was compelled to provide the public with access to lands along the river valley without directly purchasing the land and withdrawing control of private property from landowners (TVTA, 2008). Three University of Western Ontario (UWO) students took the initiative to advance this idea and formed the TVTA on October 19th, 1971 (TVTA, 2008). Over a period of several years, the trail developed and took shape. The TVTA was incorporated in 1976, the same year in which the trail reached St. Mary's (TVTA, 2008). Later, the trail extended further from two major building efforts in 1992 and 1995 (TVTA, 2008). The goal of the trail is to encourage “walking and hiking as recreation for families and individuals of all ages, and in fostering appreciation and conservation of our natural environment through the development and maintenance of marked trails” (TVTA, 2008, pg. 11).



Figure 1. Map of the location and connections between the three trails under study. Map created by William Van Hemessen (2013) using data from DMTI Spatial Inc. (2012); ESRI (2010); Natural Earth (2012). Used with permission.

Around the same time in 1995, a Vision London activity was conducted to develop a Natural Heritage System and protect the significant natural and cultural heritage of London (City of London, 2012). This system identified woodlands, wetlands, and watercourses within a matrix of urban and agricultural land uses (City of London, 2012). London is known for its trees, and the TVTA boasts butternut, eastern cottonwood, black walnut, and sycamore trees amongst its many vistas (TVTA, 2008). Out of the efforts of the Vision London activity, a policy paper on trail planning was developed by the Ecological Planning Advisory Committee (EEPAC) (City of London, 2012). This primarily impacts trails in Environmentally Significant Areas (ESAs), which are designated areas controlling the level of recreational use and acceptable amount of landscape alterations (City of London, 2012). This is an ongoing concern for maintenance activities in the TVTA, as trails could be rerouted around these areas and environmental concerns are prioritized over hiker safety (City of London, 2012).

1.6.2 Grand Valley Trail Association (GVTA)

The Grand Valley Trail (GVT), near the Region of Waterloo in Ontario, follows the Grand River watershed through large urban centres, small rural hamlets, and quiet forests (GVTA, 2009). In total, the trail covers a distance of 275 kilometres and is divided into four sections including: the Towpath (Haldimand County), the Carolinian Crest (Brant County), the Black Walnut (Waterloo Region), and the Pinnacle (Wellington and Dufferin counties plus Peel Region) (GVTA, 2009). The GVTA was founded by Betty Schneider, who created a steering committee to build a 30 mile trail along the Grand River (GVTA, 2009). Conceptualized as an idea in January of 1972, it quickly took off and the GVTA became incorporated as a charitable organization on January 23rd, 1973 (Chauvin, 1997; GVTA, 2009). Further expansions of the trail occurred in 1974, 1975, and 1987, bringing it to its current length (GVTA, 2009).

Currently, the GVTA seeks volunteers to build a community of hikers through social activities and newsletter development, creating links to other organizations and government, as well as establishing a presence in the community (GVTA, 2009). The organization is run by a volunteer Board of directors and has the mandate to build and maintain hiking trails in the Grand River Valley (GVTA, 2009). It recently released a newly designed and updated website to attract more volunteers (<http://gvta.on.ca/>). Trail maintenance is another big area of volunteer work, involving every kind of activity from repainting trail blazes to constructing bridges (GVTA, 2009). Reviewing the history of this organization gives the sense of its deep ties to the community and its pride in the beauty and value of the Grand River watershed as an ecological and cultural icon.

1.6.3 Avon Trail Association (ATA)

The City of Stratford, home to the Avon Trail and its association, is a beautiful historic city located between the Thames Valley and Grand Valley watersheds (Avon Trail, 2012). In total, the trail covers 100 kilometres of primarily private farmland or quiet country streets (Avon Trail, 2012). It runs from St. Marys to Conestogo, where hikers may refresh themselves with food and beverage from their hiking labours (Avon Trail, 2012). As with the Grand Valley and Thames Valley trails, its primary focus is to “stimulate an interest in hiking” and “encourage awareness of the natural environment” by establishing and maintaining a hiking trail (Avon Trail, 2012, pg. 3).

The Avon Trail was completed by October 30th, 1976, after it was conceptualized and implemented by Dr. Crosby Kirkpatrick (Avon Trail, 2012). It was formally linked to the Thames Valley Trail on July 10th, 1976 and the Grand Valley Trail on July 16th, 1976 (Avon Trail, 2012). Like the other trail organizations, it is incorporated as a charitable organization and has a volunteer Board of directors and separate maintenance crew (Avon Trail, 2012). Cautions in the guidebook suggest that hikers beware of insects, hunters, poisonous plants, and simply getting lost. The

guidebook indicates that a person who does not pay for access to private land assumes all responsibility for their own safety (Avon Trail, 2012). These strong warnings are deemed to be necessary for a trail which is fairly rugged and rural in nature, while the majority of hikers are from urban locations.

1.7 Summary

In this first chapter, I have described the big picture encompassing this research project and detailed some of the expected outcomes for the research. The aim of this thesis is two-fold; 1) to describe the common experience of sense of place for volunteer trail managers in three different Southwestern Ontario trail organizations; and, 2) to suggest ways in which this common sense of place could help to overcome challenges in trail management. Given the environmental, community, and tourism value of these recreational trails and their associated organizations, the research hopes to highlight strategies for their continued viability and usage by the public.

A more thorough review of trail management and sense of place is covered in the literature review (chapter 2), while phenomenology is described in the section on methodology (chapter 3). Concepts and issues raised in chapter 2 and 3 will be exemplified in the results (chapter 4) section, in which I use phenomenology to initiate a narrative description (chapter 5) of the core essences in the relationship between trail managers and their trail. In the discussion (chapter 5) and conclusion (chapter 6) sections, I will answer my research questions and present key recommendations to come out of the research.

Chapter 2

Literature Review: Trail Management and Sense of Place on the Trails

2.1 A Clear Perspective

Sign Two.

Straining my eyes at the computer screen, my brain is a tired hum of thoughts. I can visualize the signs on my research trail so clearly, but the literature, data, and my own reflections seem to be pointing drunkenly towards cliffs, wrong turns, and back alleys. Importantly, I realize that I must discard certain portions of my research journey to produce a concrete, defensible final document. Only then will I be able to communicate clearly; but the messy and real-world process of thinking about, observing, and interacting with my research topic keeps intruding into my mind. Returning to my computer, I force myself to focus on outlining a rational, well-organized literature review.

2.2 An Overview of the Literature

In this literature review, I will provide an overview of the literature on natural resource and trail management, sense of place, and the outcomes of interaction between people and places. The reader will find the literature review useful for framing the perspective taken by the author, as well as the alternative perspectives represented in the literature. Consequently, the reader will be able to draw out his or her own conclusions about the essence of the trail manager's sense of place when reading the creative fiction pieces contained in this thesis. Figure 2 provides an overview of the two pillars of this literature review – specifically, trail management and sense of place research – along with related sub-topics.

2.3 Trail Management – Challenges, Opportunities, and Managerial Action

2.3.1 Challenges in Managing Trail Experience

2.3.1.1 Environmental Concerns

2.3.1.2 Organizational Concerns

2.3.2 Opportunities in Trail Management

2.3.3 Trail User Perspectives and Trail Management Plans

2.3.4 Volunteer Commitment and Retention in Trail Organizations

2.3.5 Satisfaction with Hiking Experiences and Connections to Management

2.4 Sense of Place and the Trail User

2.4.1 Areas of Research in Sense of Place

2.4.1.1 Defining Sense of Place

2.4.1.2 Methodological Contrasts in Research

2.4.1.3 Place Meanings in Sense of Place Research

2.4.1.4 Uses of Sense of Place Theory in the Literature

2.4.1.5 Physical Factors in Sense of Place

2.4.2 Cultural Influences on Sense of Place

2.4.3 People and Place: A Joint Evolution?

Figure 2. *Topics and sub-topics covered in this literature review.*

2.3 Trail Management – Challenges, Opportunities, and Managerial Action

Trail management is challenged by both environmental and organizational concerns, but many opportunities exist for positive use of the environment through trails. For example, local people derive positive health benefits from hiking and the government can use trails to attract tourist visitation to an area (Fennell, 1999). Consequently, it is important that trail managers balance both challenges and opportunities in their daily management activities. I provide an overview of the trail user perspectives in this process – effective managerial action can be best undertaken by considering the needs and concerns of end users. The satisfaction levels of the trail user with their hiking experience will also be discussed as a contributor to managerial action.

2.3.1 Challenges in Managing the Trail Experience

Trail maintenance is challenged by the negative impacts of human use of the natural environment, and the trail management organization itself can struggle with the political and public-relations issues it faces on a daily basis.

2.3.1.1 Environmental Concerns

Environmental damages along the trails are of concern to soil and plant communities, especially when high usage levels are met with limited management response in relatively untouched environments (Nepal & Way, 2007). Hiking can compact the soil and contribute to on-going soil erosion, which can have a deleterious effect on the growth of proximate plant species (Leung, 2002; Olive & Marion, 2009; Tomczyk & Ewertowski, 2013). Ecological impacts along a trail are associated with several variables including amount of use, soil texture, and trail width (Nepal & Way, 2007). Responses to trail use levels tend to be divided between concentrating people into narrow confines during their recreational activities versus allowing them to scatter widely off-trail (Marsh & MacPherson, 2008). Some cities are responding to these ecological concerns with policies and documents impacting trail routes and design (City of London, 2012).

In many places, off-trail usage is discouraged because it can result in the creation of new and unmanaged trails (Thurston & Reader, 2001), spread of exotic species into new ecosystems (Hill & Pickering, 2006), and damage to sensitive (e.g. mountain, littoral) environments (McDougall, et al. 2011; Nemeč, et al. 2011). Threats to sensitive ecosystems are of growing concern due to the interactive effects of separate natural processes (Wimpey & Marion, 2011). Environmental shifts, such as changing climate conditions, can have additional effects on plants by shifting biogeographic regimes north (Scott, Malcolm, & Lemieux, 2002). Resource management is thus a complex and multi-disciplinary activity when considering the combined effects of human recreational use and

environmental change (Hanna & Slocombe, 2007). Different perspectives on how these vulnerable landscapes should be managed means that there can be conflicts between trail managers, hikers, and the general public.

If negative impacts develop and persist around the trail environment, political processes may emerge to address these concerns. In the City of London, Ontario, concerns about environmental protection of sensitive areas – in this case, Environmentally Significant Areas (ESAs) – is being dealt with through boundary-driven and exclusionary policy in sensitive ecosystems (City of London, 2012). ESAs are defined as “areas that contain natural features and perform ecological functions that warrant their protection in a natural state” (City of London, 2012, pg. 3). In 2012, the City of London commissioned the development of planning and design standards for trails in ESAs; this resulted in policy, processes, and practices that must be followed throughout the planning and management of trails in ecologically-sensitive areas (City of London, 2012).

The resultant document from this effort ranks the trails according to their environmental sensitivity and, based on this information, sets out management zones according to degree of sensitivity (based on abiotic, biotic, and cultural indicators of ecosystem health) (City of London, 2012). The document sets out a trail monitoring program to document environmental damage affecting specific indicators of ecosystem health, and states mitigation/adaptation measures to respond to these changes (City of London, 2012). Trails may have to be rerouted around certain very sensitive areas, and trail uses must be consistent with local- and provincial- level planning statements (e.g. local Official Plan detailing aspects of the natural heritage system) (City of London, 2012). Communities that use the trails were invited to provide input into these planning processes (City of London, 2012). Consequently, London is using strict protection measures to address concerns about trails in sensitive environments.

2.3.1.2 Organizational Concerns

There are multiple challenges in management of the trail organization itself, including the need for revenue, advertising the trail, catering to multiple demographic groups, and dealing with private landowners and tourists.

A source of revenue for the management organization is regarded as necessary for advertising the trail, raising public awareness about the trail's value, and for maintenance-related items such as weed whackers, bridge building materials, and other horticultural tools (e.g. chainsaws) (Hike Ontario, 2010). Both advertising and maintenance activities require that volunteers have expertise and knowledge in specific areas. Advertising the trail means that volunteers must provide information regarding the trail route and its associated ecological and cultural features to current and potential users (Ziaco, et al. 2012).

Information dissemination (i.e. marketing) is a challenge for organizations because they must know their audience and effectively reach that audience, yet very few trail organizations have advanced metrics on their user demographics (Hike Ontario, 2007). Further, trail organizations must make the information easy to find (e.g. guidebooks), cost effective in its distribution (e.g. online maps), and simple for all people to understand (e.g. use of signs and symbols) (Bullock & Lawson, 2008). Trail organizations must also keep their trail information – including reroutes, changes to public hikes, and important notices – up-to-date on all relevant sources of media. This places significant responsibility on trail maintenance workers, who must promptly communicate with both private landowners and trail media representatives about their activities in the field.

Another significant challenge for trail organizations involves catering to the needs of certain demographic groups who may be prevented from participating in trail-based recreation due to physical, economic, or social constraints (Bruyere & Rappe, 2007; Hunt, 2010). This might include women with concerns for their personal safety, elderly individuals with declining health, and

people with physical or mental limitations (Hunt, 2010). Hike Ontario, an umbrella organization for all trail organizations in Ontario, released a *Best Practices: For increasing trail usage by hikers and walkers* document in 2007 which outlines strategies for increasing participation rates amongst these and other individuals. This document recommends, for example, that trail groups brand the trail experience in a way that attracts novice hikers by promoting the safe, attractive, and unspecialized aspects of hiking (Hunt, 2010; Schasberger, et al. 2009).

Another recommendation in the *Best Practices* document suggests that trail organizations use external partners to provide value-added services or diversify their existing services (Hike Ontario, 2007). By increasing the number of services offered to the public, in tandem with an enhanced advertising campaign, trail organizations have the potential for enhanced growth and relevance in today's society and within the tourism market in particular. However, tourist use of the trails can be regarded as a contentious issue by trail organizations and private landowners because tourists may be unfamiliar with trail ethical codes, they do not contribute on-going monetary support to the trail organization, and they are not regularly available to contribute to trail maintenance (Chauvin, 1997).

Trail managers must have a structured approach to consulting landowners and residents living near their trails before resource-related decisions are made (e.g. changes to the trail route, building bridges, etc.) (Hike Ontario, 2007). Communication between trail managers and landowners is a substantial challenge and drain on the personnel resources of volunteer-run trail management organizations. This is because of the workload divisions within the organization; maintenance workers are not required to talk to landowners, even though they are the people that make alterations to the landscape along the trail. Failures of communication between trail managers and private landowners are common because of slow response times and extensive networks of communication. This can result in backlash against the management decisions being

made, potentially removing public access to these private resources (Bullock & Lawson, 2008; Chauvin, 1997). Private landowners often resent or fear the intrusion of outsiders on their property (Chauvin, 1997).

Although the perspectives of private landowners are not directly addressed in this research, Chauvin's (1997) analysis of their concerns brings to the fore many of the confusions and controversies surrounding public use of a privately-held resource. Property owners fear loss of property rights, personal liability, property damage, increased crime, vandalism, and exclusion from the planning processes surrounding recreational activities on their land (Chauvin, 1997). Communication with private landowners requires a proactive, ongoing process to address conflicts during maintenance work (Chauvin, 1997). Chauvin (1997) found that dealings with private landowners in the Grand Valley Trails Association (GVTA) have been primarily reactive and the organization should develop new funding models and acquire paid staff to ensure that the trails are properly managed. Such an approach is unlikely now and into the future, however, since the GVTA is a small, non-profit organization that does not focus on land or staff acquisition.

Trail users have an impact on how the trail is secured for public use, and breaches in the Hiker's Code can lead to removal of public access to private spaces (Bruyere & Rappe, 2007; Raymond, Brown, & Robinson 2011). The Hiker's Code is an established set of guidelines provided by the trail organization to the trail user via the organization's guidebook, trail signs, or verbal correspondence between Hike Leaders and hikers (Hike Ontario, 2007). These guidelines attempt to reduce careless or damaging behavior on the part of hikers who might otherwise create conflict with private landowners or other trail users (Marsh & MacPherson, 2008; Needham & Rollins, 2009). Trail organizations also carry insurance and adhere to certain legal requirements (e.g. providing liability forms to hike leaders) to address the potential for conflict between trail users and uncertainty on the part of the private landowner opening their property to public use (Hike

Ontario, 2007). Research efforts and policy measures have yet to provide substantive guidance to trail organizations as they attempt to balance recreational use with environmental conservation initiatives (McEwen & Ross, 1976; Tomczyk, 2011; Wimpey & Marion, 2010).

For tourists, attractive recreational hiking trails are a desirable feature of a destination (Fennell, 1999). Trail organizations do not perceive tourists as a target market for use of their trail because they are a transient population and do not contribute to trail maintenance (Chauvin, 1997). Tourists could contribute positively to a trail and its organization if they raised the public profiles of both, thus garnering prestige for the private landowner(s) involved. Government organizations could also offer private landowners tangible financial incentives to open their land to trail organizations to attract tourist visitation. This is an opportunity in trail management that is currently being discussed by Hike Ontario, but has not yet reached a formal policy stage as yet.

2.3.2 Opportunities in Trail Management

Despite the potentially negative environmental problems caused by human use of the trails, there are also many positive benefits that humans perceive from their use of trail systems for hiking (Frumkin, 2001; Hacking, et al. 2007). In an ageing and increasingly unhealthy North American society, the issue of non-motorized trail use by the public is of significant interest to government (Arnberger & Eder, 2011). The governmental focus on urban green spaces and recreational trail development means that attempts should be made to better understand what people want from these places (Arnberger & Eder, 2011). Trails which are environmentally diverse and aesthetically pleasing provide ample opportunity for public appreciation of and recreation in nature (Marion, 1995; Wimpey & Marion, 2010; Ziaco, et al. 2012). Formal trails are also designed specifically to sustain human traffic (Hall & Kuss, 1989).

To ensure that humans receive benefits from the trails, while also preserving the ecosystem surrounding the trails, direct and indirect measures for human use have evolved over time. Direct measures of controlling human use of the trail can include physical site management such as the erection of fences (Sutter, et al. 1993), while indirect messages can include educational messages (Johnson & Swearingen, 1992). Both direct and indirect measures can be expensive; thus, many trail organizations are struggling to fund related initiatives (Hike Ontario, 2007). Financial imperatives can generate value conflicts around trails and natural resources in general. In the following section, I will outline several key considerations for trail managers within these issues.

2.3.3 Trail User Perspectives and Trail Management Plans

Long-term natural resource planning and management procedures should take into consideration user perspectives (Spartz & Shaw, 2011). The user's perspectives, which influence related attitudes and behaviors, will impact how managerial decisions are accepted and adhered to in practice (Lee, 2011; Raymond, et al. 2011; Spartz & Shaw, 2011). Managerial decisions about natural resources also have political implications.

Trail organizations must conduct research to inform management procedures and avoid negative political and public reactions. Scholars such as Marsh and MacPherson (2008) evaluate trail environments by conducting field inspections, measuring trail conditions, and surveying relevant stakeholders. Similarly, Roger and Graefe (1994) and Spencer (2010) research multi-use pathways which were previously railway lines (known as 'rail-trails') to determine their contribution to tourism revenues. However, volunteer-run trail organizations are often ill-equipped in both personnel and financial resources to either contract or conduct such investigations.

Consequently, long-term trail management plans are either non-existent or based on little to no empirical data within volunteer-run trail organizations, leading to conflicts between the trail

plan and other official documentation (Lee, 2011). For example, trail management plans may be designed without consideration for by-laws and boundaries specified in relevant urban Master Plans (Marsh & MacPherson, 2008). These conflicts could lead to limited environmental protection of the trail system (Wimpey & Marion, 2011). Strategies which would be useful to trail organizations for maintaining the environment along their trails might include: zoning for different levels and types of use (Leinwand, et al. 2010), the creation of interpretive trails (Lee, 2011), and development of trail standards (Marsh & MacPherson, 2008).

A lack of trail planning could lead to negative relationships developing between the trail, hikers, and the hiking experience. Three main conflicts which can occur on the trail environment include: conflicts between different users, conflicts between managers and users, and hazardous or careless behaviors by users (Marsh & MacPherson, 2008). Conflicts between different users can occur when there are multiple, conflicting activities taking place on the same trail (e.g. hikers versus horseback riders, skiers versus snowmobilers) (Needham & Rollins, 2009). This often forces users to displace their trail use to different times or locations (Needham & Rollins, 2009). Unmanaged recreation occurs when managers fail to put up signage, limit the types of use on the trails, and address visitor concerns (Bullock & Lawson, 2008). This can cause trail users to resent managers for perceived deficiencies in service and safety standards (Needham & Rollins, 2009). Ultimately, this situation can decrease the visitor's pleasure in the trail experience (Hike Ontario, 2007).

The negative relationships that can develop between managers and users highlight the importance of understanding the type, direction, and strength of people's attachment to the trail environment. When resource managers understand what a place means to a community of people, and acknowledge that people are an integral part of that environment, balance can be achieved in management initiatives (Williams & Stewart, 1998). Trail maintenance programs, communication,

and marketing can be tailored to support both environmental functioning and community expectations (Williams & Stewart, 1998). For example, names on maps might use local terms for those places, acknowledging the meaning locals ascribe to a geographic space (Williams & Stewart, 1998). As described in section 2.3.1.1, the City of London is trying to involve the public in decisions surrounding trails in sensitive areas because they recognize this connection. However, humans-versus-nature is a common theme in resource management, and this thesis attempts to connect humans and managed recreation spaces with the ultimate goal of improving management practices.

2.3.4 Volunteer Commitment and Retention in Trail Organizations

Volunteering activities are freely given but committed efforts provided by one person for the benefit of another person, group, or cause (Smith, 1994; Wilson, 2000). Volunteer involvement in the trail organizations can pose a significant barrier to trail management and long-term trail planning initiatives, as volunteer organizations have particular dynamics, barriers, and limitations. Personnel requirements for trail management are high, volunteer burnout is common, and it is challenging to keep volunteers active in the organization without sufficient rewards (Bruyere & Rappe, 2007). Each person's subjective ideal of a 'reward' differs (Bruyere & Rappe, 2007). Clary and Snyder (1999) suggest that a person may seek multiple functional outcomes from a volunteer position, including the fulfillment of: values, understandings, psychological enhancement, career growth, social relationships, or escape from personal issues. This research suggests that 'free riders', or people who contribute little or nothing towards the cost of a good while fully enjoying related benefits, are common features of publicly accessible trails (Kim & Walker, 1984).

Learning about and helping the environment have been identified as two major reasons that volunteers become involved in environmental organizations (Ryan, et al. 2001). Other reasons for participation include the allure of social activities, career or personal enhancement, and putting

personal values into action (Bruyere & Rappe, 2007). Bruyere and Rappe (2007) noted that many individuals also hope to spend time outdoors during their volunteer time. Consequently, it is important that managers appeal to the internal desires of volunteers to attract and maintain their interest in the organization. This could involve trail managers taking time out of their schedule to provide volunteers who have yet to experience the trails with assistance in getting outside and interacting with nature (Bruyere & Rappe, 2007).

Recreation can be another essential component in connecting volunteers to places. Kruger (2006) describes how recreation can cause people to ascribe meaning to places and develop connections and communities with those who share their attachment to place. These communities of people can either form around the geographical place (e.g. Friends' groups protecting a certain ecosystem) or around the recreational activity itself (e.g. hiking groups) (Kruger, 2006). If the place comes to anchor a group of people, they will develop long-lasting commitments to the image of the place, perform activities in the place which support this shared vision, and socialize around the identity of the place (Kruger, 2006; Relph, 1976).

Understanding how users define a place, how these meanings are shared with others, and how this affects personal behavior and expectations of the users is important in the management of public lands and processes of community change (Kruger, 2006; Schroeder, 2007). Place can become a very powerful and moving force for people because they will develop "intellectual, imaginary, and symbolic conceptions of place.....[as well as] personal and social associations with place-based networks of interaction and affiliation" (Buttimer, 1980, p. 167). Consequently, trail organizations should have an understanding of place for the long-term retention of their volunteer resources.

2.3.5 Satisfaction with Hiking Experiences and Connections to Management

Satisfaction is a cognitive process leading to an emotional state in which the visitor feels either pleasure and happiness or sadness and anger towards their experience (Chhetri, Arrowsmith, & Jackson, 2004). Experiences can be understood as a wide range of subjective meanings such as moods, emotions, and feelings of individuals as they move through natural landscapes (Chhetri, et al. 2004; Hull & Stewart, 1995; Ittelson, Franck, & O'Hanlon, 1976). Whether the person feels negatively or positively towards their experience is often determined by their expectations of what the activity will involve prior to their participation (Dowart, Moore, & Leung, 2010). If these expectations are not fulfilled, the person feels that the landscape is lacking some essential aspect and they may seek out alternative landscapes, activities, or social groups to fulfill that expectation requirement (Chhetri, et al. 2004). Managers must thus solicit both pre- and post-experience reflections from users to determine what could be improved in future (Chhetri, et al. 2004).

Dowart, et al. (2010) suggests that visitor satisfaction is more complicated than gathering reflections from users, however. They suggest that satisfaction is an outcome of the overall trail experience, including the social aspects of the group, the norms of the experience, and the motivations of the individual(s) involved (Dowart, et al. 2010). Matarrita-Cascante, Stedman, and Luloff (2010) found, in their study, that people made evaluative judgments of the landscape's characteristics – bringing person-specific needs within natural environments to the fore of satisfaction research. Managers may therefore have to consider a whole host of variables during their evaluations of how best to fulfill the trail user's needs and concerns. This research attempts to determine if trail managers are satisfied and connected to their own hiking experiences, and how this affects their management decisions. A full list of variables and associated elements identified as essential to the formulation of visitor satisfaction are outlined in Table 1, below.

Table 1. *Variables and Associated Elements Contributing to a Satisfactory Trail Experience*

Variable	Associated element(s)
Visitor	Socio-demographic characteristics Norms and value systems Motivations driving behavior Expectations for experience Previous experiences Social influences
Perceptions	Prominence of environmental features to the visitor Order in which environmental features are experienced Mental and physical cues associated with each feature
Environmental Elements	Nature-oriented details Scenic values Management influences Presence of others Depreciative behavior
Interface	Interactions between visitor and the landscape Results in either positive or negative experiences
Satisfaction	Outcome of the overall trail experience Feedback goes into the visitor

Note. Adapted from Dowart et al. 2010

2.4 Sense of Place and the Trail User

When a hiker goes out onto the trails, they interact with the environment cognitively, emotionally, and physically through senses such as touch and hearing. The interplay between each of these variables – cognitive, emotional, and physical – is what generates the multi-dimensional concept known as ‘sense of place’. In this portion of the literature review, I will cover how sense of place is understood by researchers and some broad-level cultural influences on sense of place.

2.4.1 Areas of Research in Sense of Place

2.4.1.1 Defining Sense of Place

Definitions of the term 'sense of place' are fairly well investigated in the recreational literature (Kyle, Graefe, & Manning, 2005; Vaske & Kobrin, 2001), although a coherent methodology surrounding sense of place remains as yet undefined by scholars (de Wit, 2013; Kudryavtsev, Stedman, & Krasny, 2012; Lewicka, 2011). Generally speaking, a place is a physical location comprised of physical features, activities performed in that space, human experiences, social phenomena, and individual interpretations (Davenport & Anderson, 2005; Kates, 2013). According to Lefebvre (1974/1991), these places can also be abstracted into *spaces*, which involve: social practices through which space is materially produced; abstract conceptualizations; and phenomenological spaces of lived experience. These space-related elements appear as underlying components of the sense of place described in this thesis.

The term sense of place describes the embodied and emotional ties that people have with the environment (Johnson, 2007; Matarrita-Cascante, et al. 2010; Mayberry, 2013; Raymond, et al. 2011; Tuan, 1980). Roger and Graefe (1994) define it as the degree to which an individual values or identifies with a particular environmental setting. Williams and Stewart (1998), similarly, indicate that sense of place is a collection of meanings, beliefs, symbols, values, and feelings that individuals or groups associate with a particular locality. The specific aspects of 'sense of place', as defined by Williams and Stewart (1998), include:

- Emotional bonds – bonds develop over time and at various geographic scales to places which are familiar to people;
- Strongly felt values – values are often hard to identify and quantify;
- Insider qualities – values held by those people familiar with the place;

- Meanings – meanings are actively and continuously constructed and reconstructed within shared cultures and social practices; and,
- Context – context includes cultural, historical, and spatial aspects of context within which meanings, values, and social interactions are formed.

During early research into the phenomenon of sense of place, Stokols and Shumaker (1981) made distinctions between affective bonds versus instrumental bonds. Roger and Graefe (1994) went on to use these concepts to delineate place *dependence* (affective bonds) from place *identity* (instrumental bonds). Place dependence is the degree to which the geographic area fulfills the user's need for specific recreational activities; it involves user characteristics (e.g. age), situational variables (e.g. distance from site), and activity-related variables (e.g. degree of social interaction) (Roger & Graefe, 1994; Stokols & Shumaker, 1981; Williams, et al. 1992). Although place dependence offers valuable insight into sense of place, the complex nature of sense of place prevents it from being fully explained by the interactions between just a few variables (Roger & Graefe, 1994).

Place identity is the emotional or symbolic value that the individual places on the geographic location (Deutsch, Yoon, & Goulias, 2013; Roger & Graefe, 1994; Williams & Vaske, 2003). Unlike place dependence, it considers the more nuanced variables (e.g. human experiences, social phenomena) which come together to create feelings of attachment in an individual (Davenport & Anderson, 2005). Champ, Williams, and Knotek (2009) suggest that place identity creates discourses or 'frames' which are structured ways of speaking, thinking, interpreting, and representing the world. In broad categories, Tuan (1980) identified some of the common ways in which people construct the world around them: place as separate entity, place as part of his or her personal identity, place as social interaction, place as physical action, or place as emotional refuge.

Within leisure spaces, people actively select certain leisure experiences to support their identities and this can mean that they place themselves outside of (or hierarchically above) the realm of nature (Champ, et al. 2009; Korpela, 1989).

An individual's attachment to a place, if strong enough, can mobilize them to take action despite the complexity of the human-environment relationship (Davenport & Anderson, 2005; Greider & Garkovich, 1994; Relph, 1976; Tuan, 1974). Greater levels of attachment to a place may generate higher levels of passion and people will respond with behaviors when a place they know and care for is under threat; essentially, an attitude motivates the person into action (Ajzen & Fishbein, 1977; Jorgensen & Stedman, 2006; Warzecha & Lime, 2000). Attachment to a place can occur quite quickly, depending on the socio-demographic, social, and physical-environmental characteristics of the person involved (Cuba & Hummon, 1993; Hernandez, et al. 2007).

For children, early exposure to nature areas can contribute to the growth of their self-identity (Twigger-Ross, Bonaiuto, & Breakwell, 2003) and encourage them to develop strong identity attachments to natural areas later in life (Morgan, 2010). External factors have a significant impact on the development, type, and strength of the adult's attachment to a newly-discovered place (Kaltenborn & Williams, 2002). Despite the positive potential of connecting people to places, there is still debate in the literature over the processes behind these connections.

2.4.1.2 Methodological Contrasts in Research

Researchers in different fields use contrasting methods for evaluating sense of place; consequently, processes and variables leading to the formation of recreational sense of place are constantly being re-evaluated (Lewicka, 2011). Quantitative and statistical approaches to place are often taken by those in environmental psychology (Lewicka, 2011), while phenomenological approaches are more often taken by human geographers (Spartz & Shaw, 2011).

Quantitative measures of place are based on the assumption that positive bonds with places leads to certain behaviors (Lewicka, 2011). Quantitative studies compare people on a set of dimensions, which are often communicated through broadly-defined scales (Kyle, et al. 2005; Wiley, Shaw, & Havitz, 2000). Roger and Graefe (1994) originally used Likert-scaled statements to understand human perspectives. Raymond, et al. (2011) also used Likert scales in their research into this model, and they found evidence to support Roger and Graefe (1994). Later iterations of this scale modified it to include measures of place identity, place dependence, and a subscale of social bonding (Kyle, et al. 2005); place attachment, place identity, and place dependence (Jorgensen & Stedman, 2001, 2006); and, attachment to physical versus the social dimensions of place (Brehm, Eisenhauer, & Krannick, 2006; Scannell & Gifford, 2010). However, these scales do not qualify what places mean to individuals, making more qualitative approaches necessary.

2.4.1.3 Place Meanings in Sense of Place Research

Qualitative measures of place attachment shift the focus away from *how much* people are attached to place to the *meaning* of the place to individuals (Lewicka, 2011). Places are essentially a gestalt of interactions for the perceiver and reductionistic, quantitative approaches may miss subtle nuances within this landscape (Norberg-Schultz, 1979; Johnson, 2007). Meaning also cannot be reduced to concepts and propositions – it is a totality of images, feelings, qualities, and emotions that comprise our encounters with the world (Johnson, 2007). Consequently, Stedman (2003) and Stewart (2006) both describe how place meanings are important to natural resource planning efforts. Phenomenological approaches such as those used by Spartz and Shaw (2011) also found that individual's perspectives were mediated primarily by managerial influences and that places were valued for their provision of sanctuary, society, activity, and nature.

The research approach known as ‘embodied cognition’ has raised interest in evaluating how meaning develops as a result of interactions between the human body and its environment(s) (Johnson, 2007; Mullins, 2009). In particular, Johnson (2007) states: “movement is thus one of the principal ways by which we learn the meaning of things [...] we learn what we can do in the same motions by which we learn how things can be for us” (p. 21). Seamon (1980), similarly, suggested that sense of place is created through formation of a ‘body-ballet’ and ‘time-space routines’, which are basically the everyday activities that we perform in a place. These produce the feeling known as ‘existential insidedness’, in which we feel like we belong within the rhythm of life in the place (Seamon, 1980). Although these qualitative approaches differ from quantitative methods, both contribute to the ongoing debate and critique of people’s connections to nature (Brandenburg & Carroll, 1995). These connections have also been examined across a diverse range of subject areas.

2.4.1.4 Uses of Sense of Place Theory in the Literature

Sense of place appears in multiple contexts across different fields of research. Key researchers in the field of place, generally, include: Tuan (1974, 1975, & 1977), Stokols and Shumaker (1981), Taylor, Gottfredson, and Brower (1985), Buttner (1980), Relph (1976), and Seamon (1980). In geographic contexts, sense of place has been used to describe the human tendency to create imagined geographies (Mayberry, 2013), regional identity and associated political or economic divisions (de Wit, 2013), community well-being during times of economic restructuring (Larsen, 2004), and natural resource politics (Cheng, Kruger, & Daniels, 2003; Farnum, Hall, & Kruger, 2005). Geographers, following in the footsteps of pioneering research by Tuan (1974), have also addressed sense of place as it relates to seasonal or second homes, places of recreation, or the temporary homes of commuters (Beckley, 2003; Stedman, 2006; Williams & Van Patten, 1998). ‘Places’ are typically construed in these studies to hold contrasting ideological values

(Lewicka, 2011). For example, place might indicate either restful, familiar qualities or diverse and stimulating aspects (Lewicka, 2011). Tourism research has focused on understanding the ways in which people interact with their surroundings across and between landscapes (Deutsch, et al. 2013), as well as the community change that can occur when tourists visit a destination (Kim, Uysal, & Sirgy, 2013).

In the urban planning literature, sense of place has been evaluated in relation to factors such as social and racial heterogeneity (Florida, 2002), urban density (Wasserman, 1982), and type of landscape (Kelly & Hosking, 2008). Environmental education literatures have identified ways that the study of place contributes to re-educating people and helping them to live well regardless of their situation (Orr, 1992). Architecture has also used place-based research to investigate mathematical equations of place and quantifiable laws of human attachment to landscapes (Alexander, 2002; Salinger, 1999).

Stedman (2003), a rural sociologist based out of Cornell University, contributed to the idea of sense of place as a social construction in which shared behavioral and cultural processes develop within a physical setting. As a result, there has been a growing body of literature which studies attachment to places other than urban form, including landscapes (Fishwick & Vining, 1992), lakes (Jorgensen & Stedman, 2001), lake resorts (Williams & Van Patten, 1998), rivers (Davenport & Anderson, 2005) and wild streams (Hammit, Backlund, & Bixler, 2006), sea coasts (Kelly & Hosking 2008), mountains (Kyle, et al. 2003) and wilderness places (Mullins, 2009; Williams, et al. 1992). Modeling has also been used as a method for evaluating interactions between landscapes and people in ways which acknowledge the complex, variable, and influential nature of sense of place (Chon & Shafer, 2009; Tomczyk, 2011).

The concept of globalization contributes to modern-day studies on sense of place, as humans feel increasingly disenfranchised from the ideal of the local in a fast-paced, hyper-

connected world (Casey, 1997; Gruenwald, 2003; Lewicka, 2011). The dichotomy between 'global' and 'local' in place studies translates into other divisions in the literature – for example, insiders versus outsiders (Lewicka, 2011; Williams & Stewart, 1998). Stedman (2006) suggests that newcomers to an established group dilute the values of the real community because they are consumers rather than creators of that particular place. In volunteer organizations, frequent turnover of staff can cause older, long-term members to feel threatened by the introduction of new ideas into their organization (Lewicka, 2011). This can discourage change within the group, thus creating a contrast between a 'stagnating, backwards looking' organization and a 'progressive, retroactive' one (Lewicka, 2011).

Phenomenologists claimed many years ago that identifying with places comes naturally to people in that dwelling is a part of being (Buttimer, 1980; Heidegger, 1962). This suggests that because we are living in the real world and interacting with the 'things' around us, we are constantly experiencing the concept of 'being' present in the world through this interaction. Tuan (1975) solidified this idea by suggesting that place is clearly delineated on maps, whereas open lands are neutral spaces. Consequently, places became an ontological structure used to understand very real boundaries of such concepts as home, communities, countries, and so on (Lewicka, 2011; Patterson & Williams, 2005).

Although these ideas still hold a strong influence in the place-based literature, there are varying levels of place attachment at different spatial scales. Countries and neighborhoods, for example, are at a higher level of abstraction for people and are thus evaluated by individuals more on the basis of symbolic value over any tangible spatial connections (Lewicka, 2011). It has also been suggested that the concept of sense of place can transcend geographical boundaries; consequently, people can feel outrage when a particular place (e.g. a National Park) is being threatened, even if they do not live proximate to that place's boundaries (i.e. existence value)

(Williams & Stewart, 1998). This research investigates how volunteer-managed organizations feel towards their trail, relating to issues of insiders/outside and symbolic connections to nature.

2.4.1.5 Physical Factors in Sense of Place

Physical factors (i.e. features of the natural environment) are an important consideration within the research on sense of place, as these help to identify what landscape features have greater potential to connect to certain user types (Brehm, et al. 2006). These 'dimensions' of sense of place are usually studied using direct questions to research participants about landscape characteristics (Droseltis & Vignoles, 2010; Scannell & Gifford, 2010). Scannell and Gifford (2010) used place attachment scales with separate items denoting attachment to natural versus social features of place to identify the reasons for attachment to places. They found that abstracted ideas about places (e.g. countries) relied on *physical* factors in the formation of sense of place, whereas more local places (e.g. communities) relied on *social* factors (Scannell & Gifford, 2010). This contradicts Lewicka's (2011) finding, stated earlier, that higher levels of abstraction in place relationships are evaluated based on symbolic value over tangible qualities such as landscape.

Studies which evaluate physical factors of the landscape within the context of place dependence consider demographic characteristics (e.g. age) of users. Arnberger and Eder (2011) evaluated how different age groups responded to various social, managerial, and physical trail features. The results of this study indicated that elderly individuals preferred clean, well-maintained natural areas, while other age groups were less concerned with these issues (Arnberger & Eder, 2011). However, recent studies such as Payne, Mowen, and Orsega-Smith (2002) and older studies such as Lyons (1983), both found that the elderly experience decreased enjoyment in the natural environment regardless of the area's features. Trail design is important both from the perspective of the user and their preferences, as well as for creating sustainable levels of trail use.

Arnberger, et al. (2010) evaluated visitor attitudes and behaviors to gain an understanding of why users might avoid or cease to use certain trail systems. They determined that low use levels were often attributed to unsafe conditions for females, and were subsequently avoided on a regular basis (Arnberger, et al. 2010).

Overall, the research is unclear on whether or not users prefer heavily used or isolated trails; user conflicts increase on highly populated trails, but can also increase feelings of safety and social interaction (Chiesura, 2004). To increase feelings of safety for trail users, research has found that people need to see without being seen (Gobster, 1995; Nasar, 1997; Schroeder, 1982). This can be achieved through the careful placement of trees and shrubs and working within the existing topography of the landscape when designing trails (Gobster, 1995). It may be best for resource managers to use adaptive management, in which there is an ongoing, iterative learning process of failures and successes to correctly design sustainable, long-term trail networks (Brown & Weber, 2011; Hanna and Slocombe, 2007).

Other studies focus on place identity variables and consider the desired uses of the natural environment for people (e.g. Dwyer, 2011). In Brown and Raymond's (2007) study, participants indicated that they were more attached to a place via environmental values including aesthetics, recreation, therapy, biological diversity, and wilderness aspects. Droseltis and Vignoles (2010) used categories derived from theories of place attachment and place identity to describe places that may satisfy certain human needs (e.g. self-esteem) and social or symbolic links (e.g. spiritual). Various methods have been used to evaluate the influence of biophysical versus social factors in place attachment, including photographs, maps, interviews, and free association tasks (Beckley, et al. 2007; Bows & Buys, 2003; Brehm, 2007; Brown, 2005). Results from these studies have been placed on scales (e.g. Jorgensen & Stedman's 2006 Place Attachment Scale, or PAS), but do little to define 'natural' versus 'social' elements and/or delineate their importance in place attachment

formation (Lewicka, 2011). To better understand the mediating factors involved in sense of place research, cultural factors must be taken into account.

2.4.2 Cultural Influences on Sense of Place

Cultural factors on multiple scales (micro, middle, and macro) can moderate interactions between people and natural areas. First, at the micro level, the human body can be regarded as a discrete entity and even as a barrier to interactions with the environment (Markwell, 2001). For example, a hiker's body might become tired or hungry while out on the trails, thus decreasing the pleasure of the individual (Markwell, 2001). In his study on wilderness canoe travelers, Mullins (2009) described how an individual's skill level and interactions with other people during recreational activities can mediate their place meanings and influence their environmental perceptions. Societal expectations about gender, age, and social class may also affect how the body performs on the trails (e.g. women are not expected to be as physical as men) (Markwell, 2001).

Second, at the middle level, the trail organization has influence over the human-environment relationship via the use of signs, education, and interpretation. First, landscapes can be symbolic places when people apply their values and beliefs to them in very physical ways, as with the creation of signs (Buttimer, 1980; Greider & Garkovich, 1994). Signs provide tangible evidence of management practices to hikers using the trails, and often address the contrasting views that people have of nature (Lekies & Whitworth, 2011). Nature can inspire people to feel reverence and awe, the need to protect, a fear of danger, or the related need to conquer and destroy (Kaplan, 1979; Lekies & Whitworth, 2011).

Signs thus increase user awareness, modify expectations, and communicate rules of use – contributing to the abstracted and socialized conceptualizations of different spaces (City of London, 2012; Lefebvre, 1974/1991). Symbols and words used on these signs are expected to create joint

meaning surrounding the trail environment for hikers, while deterring 'outsiders' to the hiking experience from behaving in unexpected and undesirable ways (Lekies & Whitworth, 2011). Consequently, the effectiveness of signs can vary based on placement, length of message, importance to visitor, and the normative message presented (City of London, 2012). When signs do not reflect people's values about the use of the environment, they may vandalize the sign (e.g. desire to bike on a hiking-only trail) (City of London, 2012). Signs thus contributed to a social-natural space which can decrease feelings of risk and uncertainty in hikers (Greider & Garkovich, 1994; Gruenwald, 2003; Lefebvre, 1974/1991).

Trail organizations also moderate people's interactions with the trail environment through education (Gruenwald, 2003). Trails organizations encourage their members to get involved in externally-provided educational activities relating to the trail through incentives such as award ceremonies, official certificates for youth, and volunteering opportunities for adults (Hike Ontario, 2007). Education should be a focus for trail organizations because it: 1) decreases the likelihood that trail users will abuse the properties of private landowners living proximate to, or on, the trail (Hike Ontario, 2010); and, 2) it increases the likelihood that users with a deep understanding of ecology will come forward to protect unique, local trail resources and the broader ecosystem (Gruenwald, 2003; Leinwand, et al. 2010; McEwen & Ross, 1976; Wimpey & Marion, 2011). The assumption here is that attitudes will lead to related, positive behaviors.

Interpretive education on the trails is a primary method for getting people to directly interact with the environment (Bright, 1986; Schasberger, et al. 2009), and trail organizations are in an excellent position to be providing this service. Trail organizations can provide interpretation via guidebooks, maps, or training programs. Encouraging hikers to reflect on their trail experiences, as well as their environmental impact out on the trails, can encourage value and behavioral changes in favor of environmental conservation (Gruenwald, 2003). Guidebooks and guided hikes should

cover the natural, historical, and recreational value of the area in terminology which is accessible to the general public (Marsh & MacPherson, 2008). Maps, given the current status of technology, can be easily downloaded onto phones (e.g. iPhone applications), accessed from Geographic Positioning Systems (GPS), or printed off from trail websites (Marsh & MacPherson, 2008). Lastly, training programs can be beneficial to both the general (i.e. visitors) and specific (i.e. Hike Leaders) trail users (Marsh & MacPherson, 2008).

Trail organizations should consider including general and interpretive education as one of their goals, as this would entail many benefits. First, it would allow them to partner with the Ontario Trails Council (OTC) to provide more services. An educational mandate would also allow the trail organizations to gain greater credence with political officials and the general public. This is because hikers who become more attentive to the aesthetic and ecological value of the scenery will find their enjoyment of the recreational aspects of hiking to be deepened significantly (Hannah & Slocombe, 2007). This can cause them to become more connected to the place and pressure politicians to preserve it through financial or in-kind support (Hannah & Slocombe, 2007).

Lastly, at the macro scale level, the broader cultural body also has an impact on how people relate to the natural environment (Urry, 1992). Cultural aspects of the hiking experience include products (e.g. boots) or places (e.g. hiking destinations) associated with the trail (Markwell, 2001). Promotional activities frame the environment in a certain way, and provide some context for the recreational activities occurring in natural areas (Urry, 1992; Markwell, 2001). This commercializes nature and hiking trails (Buscher, et al. 2012) and contributes to the 'nature-myths' defined by Schama (1996). These nature-myths are frameworks in which ideas, understandings, and meanings associated with nature are produced (Schama, 1996). Visitors tend to interpret their environment in terms of their pre-expectations, and prefer setting in which they are more likely to perform effectively (Hull & Stewart, 1995; Dowart, et al. 2010). For example, some products may create the

expectation that the trail experience will be intense, extreme, and challenging. This could deter physical unfit, elderly, or disabled individuals from participating in beneficial hiking experiences (Hull & Stewart, 1995).

It may cause other people, who expect their experience on the trails to be challenging and intense, to be disappointed when the landscape proves too easy for their fitness level. These processes of human-environment interaction are well understood in the context of satisfaction, but less so in the context of sense of place. However, many researchers have suggested that satisfactory recreational experiences in natural areas can create feelings of place attachment in individuals (Scannell & Gifford, 2010; Vaske & Kobrin, 2001; Williams & Vaske, 2003). Consequently, these two bodies of literature should be understood in tandem for the advancement of both.

2.4.3 People and Place: A Joint Evolution?

Trail organizations are responsible for designing and maintaining a culture of respect along privately-owned but publically accessible trails. For example, trail organizations might prevent people from walking off-trail near a farm field and causing damage to a farmer's crops. These expectations ensure that impacts are kept from expanding beyond the trail into sensitive areas and/or they preserve the rights of the private landowner who allows hikers onto their property. It is therefore an act of natural resource stewardship as well as a practical endeavor. As has already been mentioned, there is no specific mandate within the trail organizations to undertake environmental stewardship or preservation of ecosystems – private owners of the land (be they individuals, conservation authorities, or municipalities) are the bodies with the ultimate authority and control over the environment along the trail.

Direct, learning-oriented experiences with nature could enhance the place's importance to the individual and encourage them to return and protect it; they may have a better appreciation for

the complexity of the environment along the trails and regard it as a place of exploration and excitement (Manning, 1999; Markwell, 2001). Trail organizations are the mediators and controllers of the nature-hiker interaction on the trails, though they must enforce certain rules and regulations on behalf of the private landowner (Chauvin, 1997; Markwell, 2001). Consequently, it seems that there are limits to how much the trail organization can directly promote positive relationships between the hiker and trail environment.

2.5 Summary

This literature review covers issues of trail management and sense of place. Environmental and organizational challenges facing trail management organizations were considered, as were the positive benefits people derive from interacting with trails. Trail managers must understand user perspectives and create satisfactory hiking experiences so that trail design and maintenance can be properly carried out. Volunteer commitment and retention was identified as a concern for trail organizations. Definitions of and variables contributing to sense of place were outlined, along with the uses of sense of place in various literatures and methodologies. In the following chapter, I will review the methods that I used to investigate my case study trail organizations.

Chapter 3

Methodology: A View of the Three Trails

3.1 A Trail Experience from the Researcher's Perspective

Sign Three.

Midway through one of my participation observation hikes, I worry that I have forgotten what exactly I am investigating. The fresh air pumps through my veins, the verdant foliage brushes my face, and the sun warms the soft earth, which offers up a thousand different scents for my nostrils. It is hard for me to think rationally beyond these sensations and the sweat of effort rolling down my back. I know that later, back in the midst of writing reflective notes, I will struggle to reconcile theories of phenomenology and its focus on core experience between people with the diversity of feelings and thoughts expressed by my participants in a single hike. Additionally, some wrong directional signs in my data collection process (including a participatory photography exercise) will have to be discarded as a divergence from my core analytical focus. My research journey – as well as my hike – continues down its rocky and curving trail.

3.2 Methodological Choices for the Research

In this chapter, I provide an overview of my methodology as well as the what, why, and how of my data collection procedures. This will create a bridge between my literature review (ch. 2) and results (ch. 4) sections. It is important to recall here that researchers are central to the design of a research project. They contribute to what topic is studied, the questions asked in interviews, and how the interpretation is conducted – essentially determining the beliefs and practices structuring a research project (Daly, 2007; Dupuis, 1999). I selected phenomenology as framework for my analysis, which meant that I focused on broad patterns and commonalities between multiple perspectives. Other approaches, like a narrative methodology, might have allowed for in-depth

investigation of individualized, nuanced perspectives of sense of place (Denzin & Lincoln, 2000).

However, phenomenology did provide a process for responding to my research sub-questions:

- How does the volunteer trail manager perceive the trail should be used by stakeholders?
 - *Rationale for methodology:* Phenomenology can help draw out the common themes surrounding desired environmental, social, and recreational uses of the trail.
- What does the volunteer think about their trail experience? What are their emotions towards the trail experience?
 - *Rationale for methodology:* Sense of place is comprised of complex emotional and cognitive reactions to an environmental landscape. Phenomenology will allow me to draw out themes from the interviews and from those themes, provide a description of the shared essence of the trail manager's lived experiences.
- What aspects of the trail manager's identity are based out of their trail experience?
 - *Relation to methodology:* Phenomenology strives to overcome the subject/object divide, and will provide me with guidance as I investigate the trail manager's interactions with the 'things' in the trail environment.
- Do conflicts result from differences between people in how the trail is perceived, valued, and used? If conflicts do exist, how do these issues impact trail management?
 - *Relation to methodology:* Heideggerian phenomenology encourages unity between the human mind and the 'things' which comprise the world; consequently, it is a valuable perspective for describing connections between humans and environmental landscapes.
- How might sense of place help to overcome differences in how people perceive, value, and use the trail?

- *Relation to methodology:* Understanding the meanings, beliefs, values, and feelings that individuals associate with a particular locality is important for trail management. Phenomenology will help to identify the common elements of these perspectives.

I decided to use phenomenology because it provides a process and perceptual grounding for understanding the common experiences between trail managers and presenting my understandings to the reader in a way that avoids pre-determined conclusions. I use sense of place because it identifies the processes and complexities by which people develop feelings of attachment towards an entity or 'thing' in the world. In the most basic terms, I used the guiding concept of sense of place to identify the major themes in the interview data and the methodological support of phenomenology to draw out a common essence in the trail manager's emotions and thoughts towards the trail experience. While phenomenology encourages repetitive and unifying evaluation of phenomena, sense of place highlights the importance of individual, unique experiences and combining the two therefore presents some challenges. In the following sections, I will elaborate on phenomenology and its limitations in this research project.

3.3 Evolution of Phenomenology

Phenomenology, or the study of lived experience, examines taken-for-granted experiences and uncovers new meanings about these experiences (Laverty, 2003; Polkinghorne, 1989; van Manen, 1990). Historically it has been an area of philosophy, and more recently has been used to explore human experience, study essences, and create a science of phenomena (Polkinghorne, 1989). Phenomenological researchers have focused on many topics, including the role of embodiment in perception (Merleau-Ponty, 1962), essences (Polkinghorne, 1989; Seamon, 2000),

and 'being' from an existential perspective (Heidegger, 1962). As a whole, however, the movement recognizes the relational characteristics of consciousness (Ladkin, 2005).

'Things' in the world are constantly revealing themselves to human consciousness – it is only through interacting with these things, actively *doing* something, that understanding occurs (Ladkin, 2005). Early phenomenological thinkers suggested that the world does not consist of physical objects, but is rather comprised of a network of understandings connected to each individual person's identity (Thomson, 2004). Husserl called this the 'life-world', Heidegger the 'being-in-the-world', and Levinas developed *il y a* (the 'anonymous') (Thomson, 2004). Therefore, a strong focus is placed on the subject/object divide in phenomenological studies (Lavery, 2003).

Paradigms in phenomenology include positivist (Husserl), post-positivist (Merleau-Ponty), interpretivist (Heidegger), constructivist (Gadamer), and deconstructionist (Derrida) (Norberg-Schultz, 1979; Spiegelberg & Schuhmann, 1994). Early geographers using phenomenology include: Tuan (1975), Relph (1976), Buttimer (1980), and Seamon (1980, 2000). Historical movements of phenomenology and influential persons are summarized in Table 2, below. In the review that follows, I describe the Husserlian and Heideggerian phenomenological perspectives.

Table 2. *Historical Phases of Phenomenology*

Phase Name	Influential person(s) and dates
Preparatory	Carl Stumpf (1848-1936) Franz Brentano (1838-1917)
German phase	Edmund Husserl (1859-1938) Martin Heidegger (1889-1976) Max Scheler (1874-1928)
French phase	Emmanuel Levinas (1906-1995) Gabriel Marcel (1889-1974) Jean-Paul Satre (1905-1980) Maurice Merleau-Ponty (1908-1961) Mikel Dufrenne (1919-1995) Paul Ricoeur (1913-2005)

Note. Adapted from Spiegelberg & Schuhmann (1994)

3.3.1 Husserlian versus Heideggerian Influences

In the context of this research project, phenomenology is employed to examine common aspects of the participant's trail experience and suggest the meaning of these experiences. Edmund Husserl and Martin Heidegger are discussed here as two contrasting, prominent thinkers in phenomenology who influence the ways in which I situated myself as a researcher, how volunteer trail managers understand the structure of their trail experience, and how all of these viewpoints interact (Lavery, 2003; Thomson, 2004).

3.3.1.1 Husserlian Influences

Edmund Husserl, with his formal training in mathematics, had a positivist orientation and aimed to develop a rigidly structured approach for describing the essential aspects of conscious experiences (Lavery, 2003; Mezei, 1995). This is known as eidetic reduction and involves describing a thing as it appears to the conscious completely, repeatedly, and without regard for context (Pernecky & Jamal, 2010; Mezei, 1995). His approach, known as *transcendental phenomenology*, aims to isolate the perception of phenomenon from the researcher and the participant (Pernecky & Jamal, 2010).

Husserl's approach has implications for both epistemology and ontology in a research project. Epistemology is the relationship between the knower and what can be known; ontology describes the form and nature of reality and what can be known about it (Audi, 2003; Lavery, 2003). Husserl's positivist tradition informs an epistemology in which the researcher and the researched are two separate and distinct entities (Lavery, 2003). Ontologically speaking, the positivist framework regards the world as something 'out there' to be apprehended by observers (Guba & Lincoln, 1989).

As a consequence of these philosophical groundings, Husserl relied heavily on phenomenological reduction or bracketing as a way to suspend or exclude all questions surrounding the conscious experience and minimize deviations from the tangible, cultural world (Ladkin, 2005; Stewart, 2010). Bracketing refers to an ideal situation in which a researcher can put aside their preconceptions and interpretations to see straight into the heart (i.e. essence) of the experience (Mezei, 1995). This ongoing positivist influence in phenomenology encourages researchers to seek out a universally-valid truth and create abstracted worlds of value-free entities (Gadamer, 1989; Ladkin, 2005; Stewart, 2010).

In this research project, I do not attempt to divest myself of my preconceptions and shield the research project from my personal experience. Instead, I present the reader with my self-reflexive perspectives and biases at every turn. This takes after the hermeneutical approach (described next) in which a researcher embeds his or her self-reflections into the interpretive process (Lavery, 2003). I also describe for the reader the various facets of the volunteer trail manager's perspectives towards the trail in two forms; one, in the exact words of the participant, and two, in the form of a narrative blending myself as researcher with the participant's words. This attempts to overcome conflicts between describing one unified vision of the trail experience and the individual, personalized stories associated with sense of place (Ladkin, 2005; Moustakas, 1994).

Additionally, I attempt to avoid Husserl's influence in evaluating current and potential trail management regimes. The reductionistic, abstracted ideas espoused by Husserl's transcendental phenomenology only encourage a further division between the hiker and the trail environment – a central problem which sense of place attempts to overcome (Thomson, 2004). In fact, sense of place theories in environmental management strive to do the opposite and reunite humans with nature by overcoming the subject/object divide (Cronon, 1995; Norton, 1996; Williams & Stewart, 1998).

3.3.1.2 Heideggerian Influences

Martin Heidegger, one of Husserl's followers, understood human beings as 'knowers' and disagreed with Husserl about the processes through which the exploration of lived experience occurs (Lavery, 2003). Heidegger regarded the world (and the things within it) as being cognitively unattainable, but meaning as ever-present and pervasive across time horizons (Thomson, 2004). This is embodied in the notion of 'historicity' which suggests that human understanding changes with time (Thomson, 2004). The metaphysical tradition supplies all generations with the conceptual boundaries and expectations for what they can comprehend, which additionally contributes to the formation and maintenance of individual self-identity within each time period (Ladkin, 2005; Lavery, 2003). Heidegger encapsulated this idea in *Da-sein* or 'being [Sein] as such' (Thomson, 2004).

Stewart (2010) interprets *Da-sein* as humanity's concerned being in the world, suggesting that people are constantly seeking worldly understanding (Stewart, 2010). As people suspend themselves within an experience, they come in direct contact with their own concrete existence and this allows them to breach divides between subject and object (Stewart, 2010). Heidegger focused on interpretation, language, and understanding as the source of being; in particular, he advanced the idea that knowing about something only occurs via active engagement with it (i.e. readiness-to-hand) (Ladkin, 2005; Jamal & Hollinshead, 2001; Wilson, 2012).

The interpretivist epistemology espoused by Heidegger suggests that there is a relationship between the knower and the known in a research project (Lavery, 2003). Ontologically, Heidegger believed that there were multiple realities constructed by the knower (Guba & Lincoln, 1989; Lavery, 2003). Consequently, the 'hermeneutic circle' as described by Heidegger involves a perpetual moving back and forth between the parts and the whole of an experience to bring about

depth of insight (Lavery, 2003). *Transcendental ethical realism* and the *hermeneutic approach* are used to refer to Heidegger's branch of phenomenology (Thomson, 2004).

In this research project, the hermeneutic approach dictated many stages of the research project. I began the preparatory phase of my research by reflecting on my biases and assumptions; a reflective journal was kept throughout the entire research journey to assist in the process of interpreting my own experiences as a researcher (Gadamer, 1989; Lavery, 2003). My participants had concrete lived experiences of the trail and its organization, and were asked to talk about those experiences in a semi-structured interview (Lavery, 2003). Although I did not rigorously engage in co-construction of the data with the participants through a hermeneutic circle of understanding, I did take into careful consideration the pre-understandings, language, historicity, and personal experiences of myself and the volunteer trail managers (Pernecky & Jamal, 2010). My exhaustive description of the participant's stories – which came in the form of a fictional narrative – was also meant to allow for interpretation by the reader (Pinn, 2001; van Manen, 1990). In the following section, I go into greater depth about the steps taken in designing this research project.

3.4 Methods: What, Why, and How

In this section, I will provide the rationale for my methods of data collection. First, I selected specific trail management organizations by evaluating the Hike Ontario website (<http://www.hikeontario.com/>). Hike Ontario (2007) operates at the provincial level, but is affiliated with 27 local-level trail organizations. To choose which of the hiking clubs to evaluate for this thesis, I designed a framework for selecting individual trail organizations based on their definition (chapter 1). My requirements for selection included:

1. The club must design and maintain its own trail system;
2. The club must be volunteer-run;

3. The club must cater exclusively to hikers; and,
4. The club must not have subsidiary clubs or “Chapters” within it.

Of the clubs available which fit these criteria, I selected three organizations which were familiar and proximate to me – for reasons of convenience, cost-saving, and tractability of the research project. These include the Grand Valley Trails Association (GVTA), the Thames Valley Trails Association (TVTA), and the Avon Trail Association (ATA). I was also well-connected to one of these organizations through my previous volunteer experience and used that as my point of contact for the other two groups. Consequently, I found it relatively easy to locate the information on each group’s hiking schedule and get the contact information (mostly through email and phone calls) for my interviewees. Table 3 details the data collection methods that I used, the volume of data collected through each, and the participant’s information.

Table 3. *Type/Volume of Data, Method of Analysis, and Participant Characteristics*

Type of method	Volume of collected data	Method of analysis	Participant characteristics
Participation observation	Participated in 6 hikes, ranging in length from 1 hour to 4 hours Went on 2 hikes with each of the 3 organizations Resulted in 6 related reflections	Background data for analysis (i.e. field notes) providing contextual details	Hikers were largely affiliated with the trail organization but were not always on the Board or involved in trail maintenance
Interviews with trail managers	12 total transcripts Length of interviews was between 30 to 60 minutes	Phenomenological analysis according to Colaizzi (1978)	Participants were all roughly between the ages of 45-80 and engaged in roles such as Hike Leader or President

I divide the possible methods for collecting my data between the verbal (e.g. interviews, free association tasks) and pictorial (e.g. photographs, maps) approaches (Beckley, et al. 2007; Brown,

2005; Ponzetti, 2003; Stedman, et al. 2004). Researcher immersion in the participant's experiences and verbal interviews were selected as the desired method for delving into the unstated and assumed connections between managers and their trail (Charmaz, 2004). My immersion in the research project involved elements of both verbal (taking notes) and pictorial (taking pictures with my personal camera). I was glad to have the ability to collect a wide range of data through my immersion on the trails because my original research design involved a participatory photography exercise. I do not include an evaluation of these data here because my interviews and their implications became the central, driving focus for my research.

3.4.1 Participation Observation

Researchers observe participants in their natural settings over a period of time to investigate the social and contextual processes surrounding certain activities (Emerson, Fretz, & Shaw, 2007). This is known as 'participation observation' and involves the researcher taking self-reflexive field notes of their observations (Emerson, et al. 2007). Field notes are written as events occur and describe the people, scenes, and dialogue of the situation for later interpretation and understanding (Emerson, et al. 2007). They can also include the researcher's reflections, concerns, and theoretical insights (Emerson, et al. 2007). Lekies and Whitworth (2011), for example, undertook participant observation in their research by hiking over ten different urban trails and taking in-depth notes on their personal reactions to signage along the way.

I maintained a diary of field notes throughout my participation observation, as well as my casual interactions with the volunteer trail managers (e.g. at annual meetings). For each of the three hiking clubs selected, I randomly participated in two of their regular hikes, for a total of six participation observations. The only qualifying characteristic of these hikes was that they took place on trails managed specifically by the hike organization. For each participation observation

hike, I would record the date, location, and trail involved. I would then respond to five pre-determined questions (see Appendix A), take pictures using my personal camera, and later expand on these with more in-depth reflections in my weekly musings. I also kept a formal log of my self-reflexive commentary during the hike (Appendix B) (see also Markwell, 2001).

To organize my questions from the participation observation, I put three central questions into chart form (see Appendix C): the hiker's comments about the trail, whether these comments were positive or negative, and my self-reflective comments about the hike and the trail. These categories were useful in identifying what the hiker thought and felt about their trail experience, as well as, in some cases, how they perceive the trail should be used by stakeholders. Identifying my own comments about the hike and trail were the most valuable elements of this exercise, however, as I was later able to cross-reference these organized notes with my interview data.

3.4.2 Interviews with Trail Managers

Interviews were another data collection method employed in this research project. Before describing how I used this technique, I will cover how interviews have been used in other studies. In Davenport and Anderson's (2005) research, the authors evaluated participant's perceptions of and attitudes towards landscape change through interviews. Their study was based on only 25 in-depth interviews attempting to illustrate the meanings associated with a landscape located close to people's homes (Davenport & Anderson, 2005). Their major finding, identified through the interviews, was that government regulations made people feel separate from a landscape, while ecological knowledge drew them closer to the environment (Davenport & Anderson, 2005). Information from the interviews shed light on local planning processes and place-related issues, much as this research project attempts to highlight tourism- and place-related issues.

In the academic literature surrounding interview research, there are two extremes in the number of participants recruited. In Roger and Graefe's (1994) study on the perspectives of rail-trail users, they interviewed a sample of 2,151 visitors between March 1990 and February 1991 (pp. 22). The interviews in this research were categorized into Likert-style scales, however, indicating a positivist (i.e. rational/scientific) method of approaching the subject matter (Dupuis, 1999; Roger & Graefe, 1994). In Champ, Williams, and Knotek's (2009) study on wildland fire and associated place identities, qualitative interviews were conducted with 16 homeowners and recreationists. Using these interviews, they evaluated the multi-dimensional aspects of place and leisure identity for land managers (Champ, et al. 2009). Spartz and Shaw (2011) support the latter study when they suggest that more in-depth interviews do not require as many participants. For their study, they used only 16 respondents and conducted in-depth, semi-structured interviews based on ten open-ended questions (Spartz & Shaw, 2011). The approach of Spartz and Shaw (2011) and Champ, et al. (2009) fits better with the phenomenological approach of this project, because these researchers allowed participants to provide their own stories, rather than fitting participant responses into pre-determined Likert-style categories.

Based on these guiding bodies of literature, I conducted semi-structured interviews with four individuals from each of my three case study organizations, for a total of 12 interviews. My interviews were conducted between early July 2012 and late August 2012, after I submitted and received ethics approval for this project from the University of Waterloo. With two exceptions, interviews were conducted in the comfort of the interviewee's home. My other two interviews were conducted in a hotel dining room and a Tim Hortons, respectively. In several instances, I scheduled two interviews into the same day due to the convenience of already being in the correct city (Kitchener/Waterloo, Stratford, or London). Each interview lasted between 30 to 60 minutes.

Six of the interviews were with men, and six were with women, ranging between the ages of 45- 80. Two of these people were a couple who gave me separate interviews, as they volunteer within the same organization but their roles differ. Another was a couple who I interviewed jointly because their roles were similar. For the confidentiality of my participants, I do not connect their names in this document to their position in the trail management organization. However, the roles held by those I spoke with included:

- Trail Maintenance Director
- Hike Leader
- Website Administrator
- Managing Newsletter Editor
- President
- Land Owner Relations Coordinator
- Trail Captain
- Trail Coordinator
- Activities Director
- Trail Maintenance Leaders

Note that titles do not always have associated, formal duties, nor are the same titles shared between organizations. Several participants suggested that they were a 'jack-of-all-trades' responsible for a little bit of everything in the organization, regardless of their title. Those I spoke with were also the most active in the organization and on the trails, dividing their time between Board meetings and hiking (though they do not always hike on the trail associated with their trail organization).

The interviews were tape recorded for accurate transcriptions and returned to the individual so that he/she could confirm their accuracy. All interviewees approved the notes taken, and I received two cases of constructive feedback post-interview. This feedback involved a set of emails exchanged with one interviewee and a phone call conversation with another. These emails involved an 'addendum' of sorts, in which the interview participant contributed some other thoughts about the technical aspects of trail management. The phone call involved a general conversation about how research is conducted. In both cases, there was nothing recommended for inclusion by participants to interview transcripts.

The sequence for my interviews included: preparation of questions (see Appendix D for full list), receipt of ethics clearance for research activities, interview with trail manager, brief post-interview notes (immediately afterwards, clarifying what was said and what I thought about everything), transcribing (within one week), return to the interviewee for approval of notes (within one week), and then free writing exercises to digest the information. The free writing exercises were part of my on-going reflexive process and were included in the field notes described above. I evaluated all data (including the interview and participation observation) holistically towards the end of these field notes. I identify some of my limitations in gathering my data in the next section.

3.5 Limitations in the Field

I faced my greatest challenges during the interviews. First, Roulston, deMarrais, and Lewis (2009) describe some of the challenges novice researchers can expect to encounter during interviews. These challenges include unknown factors in the interview setting, negative participant reactions, and the researcher's internal feelings. The setting can pose challenges if there are background noises disrupting the conversation or if the location makes the participant uncomfortable (Roulston, et al. 2009). Participant reactions can also unsettle the researcher and

decrease the effectiveness of the data gathered (Roulston, et al. 2009). For example, the participant may arrive late to the interview, react negatively to certain questions, or be eager to complete the discussion (Roulston, et al. 2009). Alternatively, it may be the researcher who is feeling stressed, anxious, tired, or uncertain during the interview (Roulston, et al. 2009).

Each of these problems occurred at one point or another during my research project. I attempted to reduce the issues with setting by meeting with my interviewees in their homes or quiet coffee shops. However, using a Tim Hortons for an interview proved problematic due to noise and the number of customers (often friends of the interviewee) in the restaurant. To overcome this problem, I recorded the interviews and transcribed the bulk of the conversation immediately afterwards. In my first interview, I also took notes but this made the interviewee uncomfortable and broke my eye contact/interaction with them. With regards to the participant's dismissive attitude towards the research, I attempted to provide them with sufficient information to highlight the relevance of my research for their personal hiking activities. This generated some critique from one interviewee on the theoretical/value stance of my research. During each of these minor fumbles, I learned a lot about the interview process and became more adept (with time) at conducting these conversations. Experience was the only way to reduce my nerves, along with sufficient pre-interview preparation and planning.

3.6 Analysis: Steps Taken in the Creation of Meaning

According to the hermeneutic approach, I began my analysis when I started taking notes to consciously evaluate my preconceptions in this research project. Designing my interview questions also contributed to the focus of this research project, and may have limited the form and structure of data provided by my participants. More pragmatically, I began my analysis when I transcribed the interviews and returned them to participants for verification. Once verified, I began the process

of reviewing my data by going back over the interviews and 'coding' them in Microsoft OneNote. Later, these codes were replaced with the themes presented here. This process helped to keep the data fresh in my mind for the reflections that I typed up every week.

I decided to use Colaizzi's (1978) approach because it provided me with a series of steps both concrete and flexible (Lavery, 2003; Shosha, 2012). Heidegger's (1962) version of phenomenology presents a multiplicity of interpretations – a challenging frame of reference for my stated aim of describing a common sense of place for trail managers. Colaizzi's (1978) approach allowed me to examine my data in a stepwise process that moved between individual words and holistic interpretations with fluidity and purpose, encouraging me to formulate different ideas and present these diverse ideas to the reader in narrative form. More specifically, Colaizzi's (1978) approach requires the researcher to:

1. Transcribe the interviews and asks the interviewee to validate the information.
2. Extract significant statements from the interviews.
3. Identify the meaning of each significant statement in the context of the participant's understandings.
4. Cluster these meanings into broad themes.
5. Move between the individual significant statements and the larger meanings of the interview.
6. Return to the holistic implications of the research and identify new understandings.
7. Develop an exhaustive description which illustrates the movement between the original words of the participant and the entire interview.
8. Return the results to research participants for final validation.

I began by transcribing my interviews and returning them to the participants for validation. As significant statements emerged from the interviews (Appendix E), I began to evaluate what the meaning of these statements might be (Appendix F). During the extraction of significant statements, alternative names were assigned to each participant, as required by the University of Waterloo ethics process. I attempted to remain close to the original transcripts as I created broad headings for the meaning of participant's statements. I had to go back, several times, to evaluate the statements and ensure that the meanings I created were drawn directly out of the participant's statements; I believe that my early and repetitive coding and interpretation of the data assisted in this goal.

I proceeded then by creating clustered themes within each individual interview. I created two columned-charts where the first column was labeled 'Clustered Themes-Individual Interview' and the second column was labeled 'Clustered Themes- All Interviews' (see Table 4 for example).

The words presented in this chart are based on the underlying meanings of the extracted significant statements. In the first iteration of this chart, I had all of the meanings from an individual interview to work with. I grouped these meanings first according to the italicized words seen in each row (e.g. trail group as meaning-making entity). This helped me to identify core themes within that individual interview.

For each of the meaning statements in Column #1, I went through and highlighted those which seemed similar. From this grouping process, I identified common meanings between participants and wrote down this common meaning, in simple words, in Column #2. Each of these common meanings was represented by a particular colour for all interviews. For example, light green categorizes individual meanings (Column #1) associated with the common meaning of "opportunities for social recreation" (Column #2).

Table 4: Clustered Themes from Analysis

Clustered themes- individual interview	Clustered themes - all interviews
<i>Trail Group as Meaning-Making Entity</i>	
- Fulfills goals for social recreation in the outdoors	Opportunities for social recreation
- Allows for an experience with the local environment	Importance of the 'local' to involvement in trail org
- Signs have meaning to hikers and can be analogized to guidance provided in our everyday lives	Signs as meaning-making entities
<i>Trail Group as Bureaucratic Entity</i>	
- Coordination is a central and required task for the trail group; especially in the area of communication	Communication with other stakeholders as barrier
- Dislike of bureaucracy of dealing with landowners ('liability')	
- Personalities within the group as determinants of overall group success	Fear of bureaucracy creates avoidance (non-mediator role, hands-off)
- Desire to reduce or eliminate risk in the hiking environment along the trail	Empty roles and limited membership
- Take a stance of no-involvement in conflicts between landowner and trail user; avoidance of mediator role	Fear of bureaucracy creates avoidance (non-mediator role, hands-off)
<i>Pre-Conceptions and Contradictory Views of Other Stakeholders</i>	
- Rural vs. Urban Lifestyles	"Us"/"Insiders" versus "Them"/"Outsiders"
- Experienced vs. Novice Hikers	It feels good to achieve my goals
<i>Perspectives of Trail Organization and Users</i>	
- Organization: frustration over their lack of communication with general public	Communication with other stakeholders as barrier
- Users: frustration over their use of the trail for fear that this will result in the landowner kicking the trail club off the land	"Us"/"Insiders" versus "Them"/"Outsiders"
- For Hike Leaders, leading hikes can lead to a fresh experience with natural phenomena and deepen insight into trail environment	Sharing/shared love of nature
<i>Trail Club Members as Diverse and Exciting</i>	
- Value assigned to personal interactions with other trail club members	It feels good to help out
- Trail club members as outgoing, pro-community, pro-volunteer individuals (involved in multiple groups)	Opportunities for social recreation

Resistance and Reluctance

- Hike Leader volunteers unwilling to take people out on the trails in guided hikes	Empty roles and limited membership
- Hostile towards 'outsider' groups and promotion of their problematic nature for landowner relations	"Us"/"Insiders" versus "Them"/"Outsiders"
- Especially hostile towards outsider groups participating in geocache and forager (i.e. non-hiking) activities	
- Frustration over lack of public involvement in hiking (getting them involved in trail seen as catalyst for their regular hiking activity)	Empty roles and limited membership

The categories that I developed from these processes included: meaning attributed to the trail and trail organization, connections and relationship to trail and the trail organization, management activities and challenges, and behaviors/ emotions towards the trail and nature. I selected these categories because meanings, values, emotions, and relationships lead to behaviors, which affect how management of the trails is carried out (Williams & Stewart, 1998).

In the process of writing an 'exhaustive description' of the experiences of the trail managers, I considered the cumulative impact of my participation observation field notes, interview responses, and reflective notes. Essentially, I allowed the emergence of shared meanings (the collective themes identified in Column #2) to initiate my description of the essence of the participant's trail experiences (Colaizzi, 1978). I hoped to represent the collective experiences of the trail organization(s) and its members through this narrative piece.

3.7 Summary

This chapter provides the reader with overview of an overview of the evolution of phenomenology and the implications of Husserlian and Heideggerian approaches for the research project. It describes how I went about conducting my participation observation activities and semi-structured interviews with volunteer trail managers. Coverage of my data analysis is also provided.

Chapter 4

Results: A Collection of Themes on the Three Trails

4.1 The Participant's Voice

Sign four.

I click into the My Documents file folder on my computer and pull up my records of each interview transcript. I skim over all the participant's words, feeling the memory of sitting or walking with them pulling at my mind. How many times, I think, have I interacted with these people, and yet I feel like I still struggle to truly know them. We are divided as if by a chasm; my vision distorted by the overlay of my position as 'researcher' and their position as 'participant'. Then I think about my contemplative sessions examining, categorizing, and re-categorizing their words as I continued to interact with them in non-research related capacities. I sigh, and know that I have to trust that this process has given me deeper insight into the experiences of volunteer trail managers. Presented here are the stories they told me.

4.2 Stories from the Trails: A Trail Manager's Perspective

In this data analysis section, I will bring forward participant quotes under the theme headings that emerged out of my data analysis. The collection of themes here described include: meaning attributed to the trail and trail organization, connections and relationship to trail and the trail organization, management activities and challenges, and behaviors/ emotions towards the trail and nature. The themes, meanings, and essences of participant's statements are organized for ease of reading into broad categories based around *environmental*, *social*, and *organizational* issues, as well as *visioning of alternatives* to describe the desired state of the trail experience.

Themes which suggest the common elements of sense of place for trail managers are listed in Table 5. Due to the type and form of questions asked in the interviews, this is the closest that I

could come to describing ‘sense of place’ for the individual participant. It is also important to note that the trail relies on the trail organization for existence and vice-versa, thus they are integral parts of the overall *trail experience* for the volunteer. I will add in commentary, when warranted, to clarify the full rationale behind my presentation of the data and its connection to the concept of sense of place.

Table 5. *Themes and Sub-Themes from the Analysis*

Broad theme	Collection of themes	Sub-themes
Environmental issues	4.3 Meaning attributed to the trail experience	4.3.1 Importance of the local to involvement in trail organization 4.3.2 Opportunities for social recreation in nature 4.3.3 Opportunities for environmental appreciation 4.3.4 Freedom in hiking
Social issues	4.4 Connections and relationship to the trail experience	4.4.1 Feelings of possession towards the trail environment 4.4.2 Sharing/shared love of nature 4.4.3 “Us/ Insiders” vs. “Them/ Outsiders” 4.4.4 It feels good to achieve my goals 4.4.5 It feels good to help out
Organizational issues	4.5 Management activities and challenges	4.5.1 Signs as meaning-making entities 4.5.2 Communication with other stakeholders as barrier 4.5.3 Empty roles and limited membership 4.5.4 Desire for partnership with other organizations 4.5.5 Fear of bureaucracy creates avoidance 4.5.6 Rule-adherence as solution to problem(s) 4.5.7 Long-term sustainability of trail organization
Visioning of alternatives	4.6 Behaviors and emotions towards the trail experience	4.6.1 Alternative methods of trail management 4.6.2 Catering to specific volunteer views

4.3 Meaning Attributed to the Trail Experience

As identified in the literature review of this thesis, sense of place is a collection of meanings, beliefs, symbols, values, and feelings that individuals or groups associate with a particular locality (Williams & Stewart, 1998). The stream of sense of place research based around embodied cognition also evaluates how meaning develops as a result of interactions between the human body and its environment(s) (Johnson, 2007; Mullins, 2009; Seamon, 1980). In this section I cover the volunteer trail manager's common experiences in connecting to the local environment, social recreation in nature, environmental appreciation, and freedom in their trail experience. These themes relate to the above-outlined aspects of sense of place.

4.3.1 Importance of the local to involvement in the trail organization

According to Clary and Snyder (1999), an individual's motivations for getting involved in a volunteer organization can have an impact on their perceptions and behaviors within that role. There are a variety of reasons that people get involved in a trail organization; one of the superficial and frequently cited reasons from my interviews was their retirement and sudden availability of free time. However, the opportunity to learn about and experience their local environment was also a key reason for joining.

For Joseph, his involvement in the Avon Trail is based on his desire to experience the local environment. He originally joined the group because he liked: "the idea of being outdoors and being in a part of the countryside that we weren't familiar with" (Joseph, July 24th, 2012). Similarly, Danielle has worked as both a Trail Captain and a member of the GVTA Board. When asked about her reasons for joining, she says, "that was the time when I retired [...] and I knew that I wanted to hike with a group, and I wanted to get to know the area, and spend time outside – and the GVTA was known to me, so I joined" (Danielle, August 10th, 2012).

Danielle here defines all the reasons she joined the group; retirement, meeting new people, seeing local areas, and being outside. She later notes that “we’re in it for the exercise, but also for the social time. And not a lot of attention paid to where we are” (Danielle, August 10th, 2012). Although she seems to downplay the importance of the local in this comment, her frustration that the GVTA does not hike in nearby natural areas suggests that she values the local environment in Kitchener, Waterloo, and Cambridge. She says, “...what is disappointing to me is that we rarely hike on the Grand Valley trail” (Danielle, August 10th, 2012).

Charlie of the Avon Trail believes that the knowledge and information surrounding his local trail should be recorded for hikers to share between each other and with the public. He bases this belief on his gardening efforts, and draws this analogy: “You can get all the information on the internet about gardening, but you can’t get information about gardening in Stratford” (Charlie, July 9th, 2012). He has a strong desire to interpret the Avon Trail for others by creating a guidebook for new members and the general public; “there is the need to develop specialist know-how of the Avon Trail. It needs to be recorded in such a manner that everyone can be apprised of it” (Charlie, July 18th, 2012). His focus on sharing the local aspects of the trail through written documentation suggests that he believes in its value for Avon Trail members and the general public at large.

Sarah suggests that local trails are more valuable to people, because proximity inspires affection. She is working to get people in Brantford excited about having a part of the Grand Valley trail in their area: “we’re trying to figure out how to pull Brantford in, to make them feel like they’re part of it, and give them the opportunity to brag about it” (Sarah, August 1st, 2012). Her conversation focuses on getting support for the trail from within the local community, as opposed to distant control of the trail from other communities. This attitude recognizes the politics of place and importance of keeping ownership for a trail within a community. She finishes her interview with me on a positive note, saying that they want to let “our community know that we’re here,

we're fun, and we have lots to offer!" (Sarah, August 1st, 2012). Joseph, Danielle, and Sarah are consequently aware of the importance of the local environment to their involvement, and the involvement of others, for the trail and its organization.

4.3.2 Opportunities for social recreation in nature

The trail organization guides the physical activities of the individual while providing them with an opportunity to meet new people and experience natural areas. Trail members who value social recreation have very specific ideas about what roles the trail group, as a whole, should be performing in the local community. Carrie of the Avon Trail reflects on the hiking organization as both an independent and group activity, and highlights the value of the group for encouraging her to get out and hike as a single person. She says: "one of the things that I enjoy the most, even after I became single when my husband passed, is that even though some people hike as a couple, they do not hike as a couple all the time. It can be a very independent activity" (Carrie, July 9th, 2012). The group has provided her with a feeling of structure and social support, which she values as a motivator for participating in hiking as an outdoor recreation activity.

For Charlie of the Avon Trail, social recreation is a network of social figures which support his daily activities. He believes that the trail organizations do, can, and should provide a venue for communication and social support to members. There are major problems with an organization if they do not perform this function. He comments: "Yes, the social side is so important. I felt that when I was on as honorary president for three months, I got the sense that the association lacked the social cohesiveness, people didn't know what was going on and didn't care" (Charlie, July 18th, 2012). This suggests that Charlie has made a connection between the social activities of the group and an individual's level of concern towards the trail and its organization. When he moved into trail maintenance work, however, he found a much more supportive social atmosphere and a cohesive

sense of camaraderie. He describes his maintenance team to me: “When the time is right, we use them to go and do something. The team develops a spirit de ‘corps. This is valuable because it is hard work at some times. We go for coffee afterwards” (Charlie, July 9th, 2012). The maintenance team and its work are thus an important component to Charlie’s trail experience and the meaning he ascribes to the group as a whole.

For Joseph of the Avon Trail, the opportunity for social recreation involves elements of remaining social later in life. Describing his decision to get involved in the group, he says:

“We moved to Stratford in ‘71 and we knew about the trail – it appealed to us, because my wife and I were sorta athletic outdoor people, but we were busy with family and kids. [...] So we never did- once the kids were all gone, and left home, [the Avon Trail] had this little piece in the paper that they were doing a 35th anniversary end-to-end hike. And details, a little bit of publicity about that. [...] And that was 3 years ago now, I guess, and we liked the people we met and the camaraderie and the exercise” (Joseph, July 24th, 2012).

Here Joseph reveals that he joined the trail organization only after retirement, but remains attached to the group as a symbolic entity because he enjoys sharing the experiences of recreation out on the trails with other people. He goes on to explain that he believes some people involved in the Avon Trail are also interested in learning about the environment through their volunteer experiences: “Quite a lot of our members overlap with the Stratford Field Naturalists – they’re the ones who do the bird watching” (Joseph, July 24th, 2012).

Damien believes that the GVTA provides a good avenue for communication and social support, with a special focus on it as a venue for family togetherness. He tells me that, earlier in his life, his “daughter came out with me to do trail maintenance” (Damien, July 16th, 2012). He explains that, these days: “she and her husband like to come out and do the trail maintenance with us. But they are busy, they work long hours and do weekend work as well [...] now, with a new baby boy,

they don't have any time at all!" (Damien, July 16th, 2012). His trail experience has therefore occasionally involved feelings of family togetherness through physical maintenance work, experiences which are clearly valuable to him and prominent in his memory.

4.3.3 Opportunities for environmental appreciation

Although social recreation is a priority for many trail organization members, the importance of the environment appears frequently within this broad theme of *meanings attributed to the trail experience*. Interviewees routinely describe the beauty and importance of nature as a prominent value associated with their trail experiences, as evidenced by the comments scattered across the preceding themes. The trail organization therefore functions as a structured conduit through which volunteer trail managers can interact bodily with the environment.

Originally from the United Kingdom, Tim and Doreen's move to Canada was a bit of an eye-opener about different legal situations surrounding private land in a new country. Tim explains: "When we first came to Canada in '68 [from the United Kingdom], we had to ask, 'where do you walk?' Everything seemed like private land" (Tim and Doreen, August 17th, 2012). The fact that they were interested in the environment, a subject in which they both expressed a strong interest and aptitude, spurred them to search out hiking trails and later opportunities to work with trails in a hands-on way. Doreen indicates that, "As we got more familiar, we found these places. Then we became aware of the trail" (Tim and Doreen, August 17th, 2012). She goes on to explain that they started trail maintenance work for a son's birthday: "When we joined the trail that year, I thought it'd be a good birthday present. He needed something to do, so we found somewhere we could look after" (Tim and Doreen, August 17th, 2012).

Damien proudly tells me that he has "been involved with the GVTA for 27 years" as a trail maintenance volunteer, and his discussion is loaded with appreciation for the trees, flowers, and

vistas along the trail (Damien, July 16th, 2012). He describes how he “really enjoy[s] going out on the trails” and that he doesn’t “even feel like it’s work” (Damien, July 16th, 2012). Damien connects his appreciation of the environment to the belief that he wants to work with it directly through trail maintenance. The feeling that the trail experience elicits deeper meaning for the trail manager ties in closely with the next theme, *freedom in hiking*.

4.3.4 Freedom in hiking

Also highlighted in the interviews was the sense that the act of hiking itself – of moving through the trail environment – is beneficial and desirable for the human mind and body. This theme is closely related to the theme *opportunities for social recreation in nature* because hiking is a recreational activity that also elicits social interaction. However, the *freedom in hiking* theme suggests that volunteer trail managers perceive hiking as an activity beneficial for its ability to bring them cognitively and emotionally closer to nature.

Joseph describes how his experiences with hiking have helped him to develop feelings of attachment to the Avon Trail, commenting that he loves “getting out on the trail and being immersed in the new experience of each trail” (Joseph, July 9th, 2012). Damien tells me that he believes “hiking is great for your mental state” and goes on to explain: “Y’know, everyone has problems, but when you’re out on the trail, you can let your mind wander; you can come to conclusions and if you want to talk to someone, that’s fine and if not that’s okay too” (Damien, July 16th, 2012).

Charlie suggests that he likes to keep a habit of hiking because of the initially pleasant experience he had with his Tuesday hikes: “...from then on, I went every Tuesday, year-round. It was a planned occasion. But, to my mind, it has to be a habit” (Charlie, July 19th, 2012). Sebastian, though more of a canoer-at-heart, suggests that people really love to get out hiking on the trails in

different seasons and refers to his guided hike the previous April: “Right now, the meadows are beautiful. In the springtime, this area has one of the very best Trilliums” (Sebastian, July 24th, 2012). Volunteer trail managers therefore value their hikes as ways to experience new trails, let their minds wander, get outside regularly and in all seasons. As well as coming to value the trail itself, the trail managers also seek to interact with the trail bodily through maintenance and hiking activities.

4.4 Connection and Relationship to Trail Experience

This broad theme relates to very social aspects of the volunteer trail manager’s involvement with the trail experience. In particular, they express feelings of possession towards the trail environment, exhibit the desire to share their love of nature with others, draw insider/outsider boundaries, and describe their feelings of pleasure at helping out and achieving their goals.

These themes define how volunteer trail managers articulate their perspective of their connection to the trail experience in relation to other people. In so doing, they use structured ways of speaking, thinking, interpreting, and representing the world to illustrate the emotional value that they place on the trail experience (Champ, et al. 2009; Williams & Vaske, 2003).

4.4.1 Feelings of possession towards the trail environment

The trail has special meaning to those individuals who are involved in its care and maintenance; consequently, they feel a special sense of possession towards the physical trail. Damien notes that as a maintenance worker, he feels a particular sense of possession towards the Grand Valley Trail (GVT). He states that “I guess because I’m involved with the trail, I’m passionate about it” (Damien, July 16th, 2012). He yearns to talk more about the trail itself at the GVTA Board meetings, but concedes that there are other important issues to discuss (such as insurance or landowner relations) and that “I’ve gotten used to this situation, and know that I look after this,

they look after that” (Damien, July 16th, 2012). However, the symbolic value of the trail holds great weight for Damien and he prioritizes it over bureaucratic issues.

Similarly, Sebastian states: “Trail maintenance is fun because this section is just ‘my section’, and you don’t have to pay taxes on it or anything” (Sebastian, July 24th, 2012). Having access to land for your personal enjoyment and physical activity is one of the highlights of being a trail maintenance worker for Sebastian. Others see trail maintenance and having possession over a section of trail as their personal need for perfection; Charlie explains that “I tend to be alone and I like to do the job my way; no one else is as good” at maintaining the trail (Charlie, July 19th, 2012). Consequently, the emotional value that volunteer trail manager’s place on the trail environment impacts how they interact with other stakeholders.

4.4.2 Sharing/shared love of nature

Volunteer trail managers point to their experiences hiking with others, often in formal leadership roles as Hike Leaders, as a way to re-learn about certain aspects of the trail. However, negative impacts caused by this sharing of nature is dealt with differently between individuals. For Joseph, leading a hike for young children inspired curiosity about the damselfly:

“Yes, and with the young kids that one day when I was out, I was wondering what is it about the aspect of nature that makes it so fantastic? We found damselflies, and they were all excited [...] I got home from that day and thought what a wonderful experience it was. But it was hard to put in words- there was the element of people, the element of introducing kids to stuff they don’t know about, I’m opening up a whole new world to them” (Joseph, July 24th, 2012).

This incredible experience moved Joseph to contemplate the importance of sharing his love of nature along the trail to enhance his own reflective learning about what nature means to him

personally. A similar situation occurred for Damien of the GVTA, who notes that his experiences leading hikes have been rewarding for generating an infectious love of nature between all participants. He explains what his hikers focus on when they are out along the trails:

“Well, basically in the spring, the hikers are seeing the flowers. [...] When I’m out, I see the Trilliums all the time, so, okay I won’t take a picture of that. But the people hiking with me will take, y’know, 10 pictures of the flower. [...] That always makes me happy, that they enjoy it so much. [...] But if you don’t have an eye for nature, you wouldn’t see those things”

(Damien, July 16th, 2012).

In this short paragraph, Damien indicates that his own feelings of pleasure in a hike are enhanced when he sees others focusing on beautiful objects along the trail, especially flowers. He also infers that some people are not properly equipped to pick up on the subtle nuances of nature; only some people ‘have an eye’ for such things. Damien suggests that regular interaction with nature is important for people’s ability to perceive beauty along the trail. Consequently, he recognizes that a person’s experiences with nature influence their perspectives of it.

Sebastian from the TVTA has a focus on sharing his love of nature with young people, and getting them volunteering in nature along with people their own age. Previously a teacher with grade school-level kids, Sebastian supports initiatives that get children and youth out in nature more often. He states that “students are the future and I enjoy hiking with them [...] but the young people aren’t very eager when they know there are just going to be old people on the trails” (Sebastian, July 24th, 2012). Thus, he frequently works with school groups to either bring kids out onto the trails to hike or do maintenance, or he goes into classrooms and teaches *Safe Hiker* courses. Getting groups of young people to hike together avoids the problem of ‘forcing’ them to hike with older people.

He also notes that there's "a bit of a divide – culturally – between young and old. The older [hikers] will sign up for memberships and enjoy the mailed newsletter, they like the schedule; whereas young people are much more spontaneous" (Sebastian, July 24th, 2012). The method in which the trail is consumed by older versus younger people therefore varies, and how each age group experiences the trail is not well-represented in this thesis. As has already been mentioned, people who are volunteering for the trail organization's Board or maintenance team are almost exclusively retired or more mature in age.

Sebastian also explains that there are certain negative environmental impacts involved in getting the general public out on the trail. Although encouraging people to hike the trails is undoubtedly positive for their health, it does introduce the risk of spreading invasive species into that same environment. Sebastian states, "I think that the invasive species are caused by hikers. Like, garlic mustard for example is spread by hikers" (Sebastian, July 24th, 2012). Having greater volumes of hikers along the trail also increases the risk that someone will be injured; conservation authorities have responded to this concern by stripping forests of, for example, risky tree branches. Sebastian describes how this has altered the landscape along the trail: "I swear that if you blindfolded me and dropped me anywhere along the trail, I could tell you whether we were in a volunteer-managed or conservation-managed section. If a tree starts looking sickly, it is gone, in the conservation areas" (Sebastian, July 24th, 2012). Consequently, the sharing of nature is assumed to also hold certain risks for the environment, ranging from the introduction of invasive species to greater levels of environmental control for human safety.

Tim and Doreen believe that people should be able to access and share their love of nature, though it should be done with consideration for different types of usage. Having a strong history of academic activity in biology, Tim describes his thoughts on letting people create informal trails in natural areas:

“Any of the trail around here, as you go through the Killworth area and Hillbury to Adelaide, there are multiple trails that people have made. But people would have done that anyways. People living surrounded by subdivisions, their kids are going to get out on the trails. I don’t find that to be a problem in the city. It’s not particularly environmentally-sensitive land, anyways. [...] We’ve got the usual battle between the extreme ecologists, who don’t feel that man is part of any ecosystem- man or woman. Whereas as a biologist, I always felt that humans are a natural part of the ecosystem. And excluding them is as bad as excluding trees or deer or anything else, and means that you don’t have a natural environment. What you have to do is prevent unreasonable use by humans. Mechanized vehicles, that kind of thing” (Tim and Doreen, August 17th, 2012).

Addressing trail management issues by considering humans and nature as a coupled system can increase the potential that people will actively support and conserve those natural spaces (Spartz & Shaw, 2011). Joseph and Damien seem to have an innocent love of sharing nature with others – issues of invasive species and risk while hiking are not regarded as a concern. For Sebastian, Tim, and Doreen, these issues are of concern, but dealt with in different ways. While it is important that Hike Leaders share their love of nature, it is also important that they communicate with the hikers about various ways to reduce their impact on the environment, or at least discussing the potentially risky aspects of hiking (e.g. changing their shoes before hiking in sensitive natural areas to avoid spreading invasive species).

4.4.3 “Us/Insiders” versus “Them/Outsiders”

For the volunteer trail managers, being part of an organization which shares their values is pivotal to their self-identity as a ‘volunteer’, ‘hiker’, and ‘trail manager’. Certain qualities were associated with the “us” or “insider” group of volunteer trail managers, including: *rural, skilled,*

local, responsible/experienced hikers, and physically active. “Them” or “outsiders” were more often defined as *urban, non-hikers, or alternative stakeholder groups* having interests/motivations other than hiking (e.g. private landowners).

Urban hikers are perceived as requiring greater levels of care and generating more problems than rural hikers. Martina of the Avon Trail says “I don’t get a lot of complaints about the trail – most [hikers] know what to expect” but she later goes on to say that “there was a 30 year old bridge which we’ve been using for a long time [...] now we need to put in a new trail because there are new people using the trail and they don’t want to get dirty and fall into the stream” (Martina, July 9th, 2012). She later states that “the new urban people coming into the trail have forced us to adopt the standards of the Bruce Trail Conservancy” and she suggests that the people visiting Stratford (a city with high levels of tourist visitation) are from Toronto and other major urban conurbations (Martina, July 9th, 2012). Carrie suggests that outsiders to the trail environment increase the needs for insurance. She says that “times have so changed. For about 25 years, we did not use insurance. And now we need to have insurance coverage for everything” (Carrie, July 9th, 2012). New users and shifting regulations alter the focus of the trail organizations from local to global, perhaps inducing feelings of being threatened by global forces and increasing the us-versus-them dichotomy (Lewicka, 2011; Williams & Stewart, 1998).

Charlie describes outsiders as those who are not a part of his current team of trail maintenance workers; he already has a reliable team and likes to use their expertise to get through the job at hand. Using the known skills of these individuals, he can go out and “know what tools we need, how long it will take to finish the job. So it works out quite efficiently and effectively” (Charlie, July 18th, 2012). Despite being resistant towards bringing unknown people onto his maintenance team, Charlie is open to all types of trail users. He describes how “conditions change all the way through” the trail and thus “you have to be open-minded to all types of users” (Charlie, July 18th,

2012). Members of the trail group are therefore selective in which areas of their trail experience entail threats from outsiders.

For Sebastian of the TVTA, landowners are the outsiders to the trail organization. On the one hand, landowners can be an inconvenience as they prevent certain management actions; conversely, they can be enjoyable to deal with. Whether they are enjoyable to deal with also has to do with the rural-urban divide so often mentioned. Sebastian states that,

“The landowner conflicts that we have [...] are someone who is newly moved to the trail, they’re typically urban and have purchased a piece of paradise that they want to keep to themselves [...] Rural people understand that this land is not completely their own, and they’re happy to share it [...] So I love working with rural landowners” (Sebastian, July 24th, 2012).

The needs and expectations of landowners are also something of a mystery to the trail organizations. Sebastian describes how the TVTA interacts regularly with landowners: “they get a copy of our magazine, they are associate members of our club [...] I phoned every single one and invited them to our annual picnic, they duly thanked me and not a single one of them showed up” (Sebastian, July 24th, 2012). Landowners are likely as diverse as the trail itself, and their expectations for the trail organization will vary greatly. In some cases the landowner’s behavior is completely outside of the trail organization’s influence and often inexplicable to them as well. Doreen of the TVTA explains how they have a “mad landlord near Ranford [...] For some reason, he spent a lot of money bulldozing all the land” (Tim and Doreen, August 17th, 2012).

However, without adequate time and resources the trail organizations are unable to adequately address the needs of this outsider group. In the case of invasive species, Sebastian says, “it’s a little bit difficult, you see, because we can’t put our landowners through the expense and difficulty of removing the Giant Hogweed if we find it; we don’t want them saying that we’re more

trouble than we're worth" (Sebastian, July 24th, 2012). The trail organizations are coming to these private landowners with very little to offer them in return for the use of their land. The trail organizations are thus very sensitive to feeling like a 'burden' or a 'negative impact' on the private landowner and this generates stress and anxiety in some trail organization members.

For Damien, outsiders to the group are liable to harm the core values that the trail organization has established over time. He applies this to both novice hikers and municipality 'outsider' groups. He states that "I'm almost 99% sure that they are experienced hikers that stay on the trail. Meanwhile there are other hikers who walk off-trail on the landowner's field, and a lot of the time, we only have permission to walk on the edge of the field" (Damien, July 16th, 2012). Urban hikers are also seen by some rural landowners as 'staking out the area' for potential living and development opportunities. Damien says that "a lot of people in the country feel that urban people are going to come into the country and 'take our land' over type of thing" (Damien, July 16th, 2012). Thankfully for him, he works with both urban and rural mindsets and that helps him to see the dichotomies between the two. This helps him in his job of directing trail maintenance workers as they encounter the conflict between both groups.

Methods of communicating with outsider groups, and which outsider groups to communicate with, are a source of controversy for the trail organizations. As Damien says, "we need to advertise, get the information out to the general public" about what they do as a group (Damien, July 16th, 2012). Too many people "who live here their whole life don't know about the GVTA" (Damien, July 16th, 2012). Certain outsiders groups, especially young people, may not be desirable targets for hiking or volunteering with the trail organization because they are regarded as transient and spontaneous hikers/volunteers. Damien says that the "Grand Valley Trail hikes are all listed on the internet. Our average age of membership is 40-50 years, we don't get younger people, so we should be advertising in the newspaper" (Damien, July 16th, 2012).

Similarly, Danielle perceives that insiders to the trail group set the dynamics of how the organization operates. The club must be responsive to the needs of this insider group, even if there are diverging opinions about what these needs are. Danielle expresses a desire to have hikes that are “always going to be in the same place [...] the GVTA doesn’t do carpools and the hikes start at some obscure place, at 8:30 in the morning, on the weekend” because “hike leaders do what they want to do. They’re volunteers, too, and they’ll want to hike new trails” (Danielle, August 10th, 2012).

Consequently, the trail organizations are facing some hike planning issues from within their current membership. Hike Leaders have complete freedom to take hikers anywhere they please, but this is upsetting to some of the insider group members as they have to, in the words of Danielle, “ask myself ‘why are we maintaining this trail, if our members are not hiking it?’” (Danielle, August 10th, 2012). She later acknowledges that “our mandate is to create a footpath for the community. So there is this bigger goal” (Danielle, August 10th, 2012). Regardless, the refrain of “there’s so much to hike through right here, I don’t like going further afield” is a battle ground on which the trail organizations may find themselves in the coming years (Danielle, August 10th, 2012). The current membership may have particular needs and desires (e.g. the desire to experience the local environment) which are not being met by current hike outings or trail management initiatives.

For Sarah, local people are the outsiders and they are not giving back sufficiently to the maintenance of the trails. She is concerned that with “all the other social things that are coming up, people are just going and hiking anywhere” with reference to the phenomenon *Meetup.com* which has been allowing people to form non-paying, spontaneous hiking groups that use the maintained trails without the awareness of the trail organization (Sarah, August 1st, 2012). Sarah notes that “there’s no contribution to ‘how did that path get there’? People don’t even think about how it got there, who maintains it, who makes sure erosion doesn’t continue” (Sarah, August 1st, 2012). This

form of 'free rider' usage of the trails generates concerns that maintenance workers will not be available to care for the trail into the future. Sarah states that "many people want to use the trails but don't want to be involved in the management of them" (Sarah, August 1st, 2012). She sees advertising the trail and strengthening the fabric and community of the existing group as a method for attracting new members. It is certainly concerning that she believes "members of our own club don't know what's going on, they don't read the newsletter or go to the website" (Sarah, August 1st, 2012). This makes communicating with both insiders and outsiders a difficulty.

Josh identifies the societal disregard for trails and the impacts of urban areas as two negative forces acting against the desires of trail organizations. He explains: "the closer you are to an urban spot, the more likely you're going to have a problem" (Josh, August 1st, 2012). Political forces in urban centres can be either helpful or hindering, as these forces may provide financial support or cut the support to trail organizations. This is in response to the conflicting views in society of what is important for city budgets:

"Society talks out of one side of its mouth- we have too many cars. Well, to start we have too many humans, and we're too fossil fuel dependent. And we build all these concrete roads for them to drive on, and run all our cars. And then out of the other side of our mouths, we say we need to get more trails. But what's the first thing to get cut? At the City of Kitchener? Trails!" (Josh, August 1st, 2012).

It is only through the city that the trail organizations are able to access certain lands, but swings in public opinion towards trails create instabilities in the funding model for trail organizations. As a consequence, they often seek *partnerships with other organizations*, a theme addressed in section 4.5.5. In this complex theme on insiders versus outsiders, trail managers share a sense of place through certain values and beliefs about their own self-identity, including elements of being *rural, skilled, local, responsible/experienced hikers, and physically active*.

4.4.4 It feels good to achieve my goals

For Josie, Tim, and Doreen of the TVTA, they have positive feelings towards their trail experience generally, and the goals it has helped them reach in particular. They believe that their volunteer contributions to the TVTA have resulted in a well-maintained trail, and they have great pride in the goals that have been met for the trail as a whole. Josie explains: “I think that historically the trails are well-established and well-maintained [...] the people involved are a really dedicated group of people” (Josie, August 8th, 2012). Tim states that the TVTA “is lucky to have a really good team of workers [...] we just finished a big round of bridge-building” (Tim and Doreen, August 17th, 2012). Even though the dynamics of the club and its activities are expected to undergo cycles of highs and lows, they regard the current status of the club in a very positive light. In past years, maintenance was not always so good along the trail, as Doreen explains: “but the section of trail that we are trail captains of now at the time had grass that was knee high [...] you couldn’t see the path with unknown footing” (Tim and Doreen, August 17th, 2012). These functional returns on their volunteer investments of time and effort encourage their sustained involvement in the trail organization (Clary & Snyder, 1999).

Charlie states that he feels pride in setting and accomplishing very concrete goals, such as building a bridge, in his work with the Avon Trail. He explains his efforts in building a safer stile for elderly hikers and how much he enjoyed completing this task: “I decided myself how to do it, no one forced me to use any specifications. I sketched it all out, went to the lumber yard, got the materials, and prepared it all. It was the first step stile on the trail” (Charlie, July 18th, 2012). This situation gave Charlie an immense sense of satisfaction in his trail maintenance work and heightened his interest in designing advanced structures along the trail.

Damien of the GVTA believes hiking inspires goal-setting behavior in which challenges are identified and overcome. This includes end-to-end hikes as well as trail design and maintenance

activities. He describes with pride the goals that he has already fulfilled or has in-progress: “I’ve hiked from end-to-end on the Grand Valley Trail four times, and the Bruce Trail twice; I’m on my third Bruce Trail end-to-end now” (Damien, July 16th, 2012). Josie agrees and has herself completed several end-to-ends, with badges as tangible evidence of her accomplishments. However, there are some challenges which may prevent her future end-to-end efforts. She says, “I have a badge myself, I’m considering the Elgin but I’m not sure yet if I’m going to do it. It’s a lot of kilometers in a short time, since it’s on a weekend, and I’m a little spoiled now. I don’t know if I want to do that many kilometers in a day” (Josie, August 8th, 2012). Consequently, end-to-ends require a devoted effort over a series of weekends to fulfill and the lofty kilometer goals are often a deterrent to those unable to devote the required hours.

For Sarah and Danielle, they enjoy taking on diverse tasks and fulfilling them for the betterment of the organization. This makes them both feel good about their contribution to the group as a whole. Sarah has so many activities that she does for the organization that she can’t remember them all, but she sees how everything connects; “So all the things I do, I’m never doing one thing separately. Everything connects together” (Sarah, August 1st, 2012). She describes her efforts to keep the volunteer trail organization afloat; “I could still pick up slack, I could do something. Because otherwise we lose momentum, I don’t want it to slip back to nothing and have to start over again” (Sarah, August 1st, 2012). She feels that she has achieved her goals of keeping the Board moving forward and energetic, which requires carefully monitoring people’s workloads and keeping them engaged. Similarly, Danielle describes how “it’s a volunteer organization, people drift in and out” meaning that existing members have to take on more tasks (Danielle, August 10th, 2012). She has balanced a multitude of jobs over the years and there “was both fun and frustration in that” (Danielle, August 10th, 2012). Consequently, the nature of the volunteer organization both inspires and challenges its existing membership.

Josh of the GVTA feels that long-term involvement in the trail experience feels good, and has honed his skills in creating maps and teaching others about nature. He describes why he got involved in the organization: “I like leading hikes, I love planning hikes, I love maps” (Josh, August 1st, 2012). With a background in teaching, he thrills at the opportunity to speak with knowledgeable students and learn more from them. He says, “I love it when people who know as much or more than me come on the hike, like the field naturalists” (Josh, August 1st, 2012). These positive feelings are also involved in the theme ‘it feels good to help out’.

4.4.5 It feels good to help out

Charlie and Damien suggest that contributing your personal set of skills to the organization benefits both the group as a whole and yourself as an individual. Charlie explains that his feeling of confidence within the organization came with time, and “when I first joined the Avon Trail Association, it took two or even three years to get the feeling – to get to know the trail, get the feeling of what people expect, and what they want to do and can do” (Charlie, July 18th, 2012). This gradual building of familiarity keeps him involved with and contributing to the organization on a regular basis. Similarly, Damien has “been involved with the GVTA for 27 years...I have always been involved in structures [...] trail maintenance [...] and always been a trail captain” (Damien, July 16th, 2012). These roles took time and focus to perform properly. Damien “took a break because I don’t think I was getting the feedback I should have got” (Damien, July 16th, 2012). Long-term members to the trail organization are thus eager to devote their time and skills to the group, but need to feel supported and appreciated to function.

Sarah and Josh believe that contributing to the organization provides good feelings about being community-oriented and volunteer-minded. Sarah describes how she tries “to be a good voice for volunteerism” and has a very positive view towards involvement in volunteer organizations; she

believes that “everybody can do something. There’s just one little thing they have to realize how important that is to the whole organization” (Sarah, August 1st, 2012). Consequently, her involvement and even minor contributions in the organization are regarded as positive for the community and organization as a whole. Josh suggests that most problems can be overcome by working with all stakeholders in the community so that “rather than getting all worked up about it is to find solutions where everyone’s happy” (Josh, August 1st, 2012). Thus, being open and engaged with people is a central focus of the trail organization. This section has detailed how social aspects of the volunteer trail manager’s shared sense of place impacts their perspectives of other people.

4.5 Management Activities and Challenges

In this section, volunteer trail managers describe the regular activities undertaken to maintain the trail, and detail how these initiatives face certain challenges. The shared essence of this trail experience is *challenge*, which draws the trail managers together in a critical discussion on the personal and societal implications of their organization. Cultural influences on sense of place, ranging from trail management signs to dominant discourses around insurance, are here important to the trail manager’s emotional and cognitive connection to the trail.

4.5.1 Signs as meaning-making entities

Signs provide social and abstract cues to hikers and are designed and installed by the trail management body (Lefebvre, 1974/1991). In particular, volunteer trail managers see signs as a way to interpret, provide safety information, and regulate hiker behavior along the trails.

Although interpretive signs are desired by trail managers, they may not have access to the funding needed to create educational signage along their trail. Martina explains that they “wanted to do interpretation along our trail with signs about the countryside” but have been prevented from doing so because “funding for trails, especially with regards to hiking, has dried up and is no longer

available to us for access” (Martina, July 9th, 2012). The TVTA has had greater success and Josie of that organization told me they have: “parts of our trails that have actual signs that were put up a few years ago, which describe the flora and fauna and so forth. I think people really like that” (Josie, August 8th, 2012). From my observation of the trail organizations both on the trail and in the Board meetings, I gather that funding is a major reason environmental stewardship/education is not a priority in their organizational mandates. With limited personnel resources, trail organizations do not have the time to create signs beyond those describing safety and rule-based information – though some environmental information is provided in their guidebooks (Avon Trail, 2012; GVTA, 2009; TVTA, 2008).

Safety information is also communicated to the hiker through signage. Joseph of the Avon Trail says: “We’ve posted signs, but we don’t officially take the position that they [the trails] are safe. We don’t have a mechanism for protecting anyone who is not a member on the trail” (Joseph, July 24th, 2012). Joseph regards signs as a valuable technique for keeping hikers safe and ‘on track’; he also believes that blazes along a trail can be analogized to the guidance that people need to function in their daily lives. He says: “we taught the kids about the blazes, and how to read the blazes. But those blazes are a lot like life. Y’know? We all need guidance. We all need guidance every once in a while” (Joseph, July 24th, 2012). Consequently, the blazes and signs along a trail have come to represent for Joseph a bigger worldview about reading and observing rules; these rules can also change based on the dominant management authority.

Damien of the GVTA tells me that requirements and designs for signs vary between different management authorities. He describes the differences in sign requirements between the Region of Waterloo (an upper-tier management authority) and the City of Kitchener (a lower-tier management authority):

“When our trail goes over private area, we have signs which show what you can do and says at the bottom ‘use at your own risk’. But the Region allows horseback riding and bicycling, so we had to block those prohibited activities out on our signs. And the City of Kitchener doesn’t allow our signs. Cause they have their own regulations” (Damien, July 16th, 2012).

Consequently, the form of signage varies between different management authorities in very pivotal ways; the GVTA has to ensure that their signage, or lack thereof, adheres to the dominant management authority’s specifications. Since the GVTA crosses Region of Waterloo land where potentially conflicting activities are allowed, such as bicycling, those who choose to hike these areas must be willing to put up with other user types.

Whether or not these signs affect human behavior is a question mark for Damien, who states: “On the Bruce Trail, they say that you can’t bike- some people ignore the signs. Most people are polite, I don’t have concerns about them, they follow the signs” (Damien, July 16th, 2012). Josie describes a problem with early iterations of the signs: “we used to have the hiker’s code on the signs, but people stopped reading it because it was too wordy” (Josie, August 8th, 2012). Trail managers may therefore be hesitant to invest money in more signs, as the design of signage is complex and the impact of the signage on hikers uncertain. One behavior that signs are not used for in the GVTA is getting people onto the trails – Damien states that “we also don’t have signs out advertising the trail” (Damien, July 16th, 2012). Advertising the trail with signs could, according to Sebastian, attract unwanted user types and this can upset the private landowner.

Signs were mentioned several times to me during casual conversations as expensive and difficult to protect from vandals. Damien from the GVTA states that “the signs are often vandalized, in fact they do not last long” (Damien, July 16th, 2012). Sebastian of the TVTA describes how signs can generate controversy and anger if not properly designed:

“The landowner is a man who owns and uses motorized vehicles. So an early iteration of our sign had no motorized vehicles without landowner permission, but now we just say ‘hiking only’ to avoid being confrontational. [...] When we have a picture of a bike with a slash through it, our signs are cut down; even vandal-proof hardware has been removed” (Sebastian, July 24th, 2012).

Josie of the TVTA was involved in “replacing the signs that have worn out” (Josie, August 8th, 2012). She viewed signs as sites of meaning with political undertones; she describes how the TVTA and organizations such as Hike Ontario “talked a lot about risk management policies and how to set up [...] signs in such a way that they were worded so that you knew what was permitted on the trails” (Josie, August 8th, 2012). As a result, design and maintenance of the signage can be a source of stress and concern for the trail organizations.

4.5.2 Communication with other stakeholders as barrier

Members of the trail organizations identified communication with other stakeholders, including the general public, potential new members, and landowners, as a barrier to the long-term sustainability of their organization. Martina discusses their marketing strategy and how they create pre-expectations in the general public around the experience of hiking the Avon Trail. She says, “the Avon Trail does advertise itself as a backcountry trail, so I think that [the hikers] have the correct expectations” (Martina, July 9th, 2012). However, she later goes on to stipulate that they have “a hard time balancing the rural versus urban expectations” because “Stratford advertises itself as a tourism location, and the Avon Trail is included in this, so [we] get a lot of visitors from Toronto who are expecting to have a very urbanized trail hiking experience” (Martina, July 9th, 2012). Although this challenge is not unique to the Avon Trail, it does have implications for the satisfaction levels of hikers expecting certain landscapes in their hiking experience.

According to Carrie, the issue of communicating with external landowners was flagged as a barrier for the on-going management activities of the Avon Trail Association. She notes that some landowners “[...] know about our activities, but they do not let us know when they move or their property boundaries change and the trail is on new land” (Carrie, July 9th, 2012).

Charlie, in contrast, flagged internal communication within the trail organization as an issue. He highlights the challenge of communicating, as a maintenance person, with both the landowners and trail organization. He says, “I don’t know what the agreements are, if we can cut trees; as a maintenance person, we don’t know the names of the persons we’re dealing with” when they go onto private land (Charlie, July 18th, 2012). He stresses that “people should have the information available to know how to deal with the situation” whether it be in a social, maintenance, or hiking-related context (Charlie, July 18th, 2012).

Joseph furthers this belief by indicating that coordination, record-keeping, and communication are required tasks for the Avon Trail Association. Since trail organizations often do not count the number of people using their trails, there are concerns that attracting greater volumes of people will upset private landowners. Joseph says, “that’s a grey area- how much do we want to promote the trail, how many people do we want on the trails, how public do we want it? The more people we have, the edgier landowners get” (Joseph, July 24th, 2012). Although greater public prominence for the organization may have its benefits, there are also serious drawbacks which need to be considered. Advertising the trail, and dealing with the implications of heavy trail usage, requires significant contributions of “time and energy to organize these things” but “everybody seems to be so busy” (Joseph, July 24th, 2012). Given the limited volunteer support within the trail organizations, getting more people onto the trails becomes a negative issue; but without them, the purpose of the trail is somewhat lost.

Damien describes how communicating with the public, trail members, and landowners about liability is a source of anxiety and frustration for volunteers. Given the high level of knowledge required for filling out insurance applications, only people with specialized knowledge are able to manage these roles and an ongoing culture of fear and uncertainty surrounds the issue of 'liability' and the resultant lawsuits. Damien describes the legal situation for hikers on private land:

“There is a liability issue, but if you are voluntarily going out on the trail the landowner is not responsible, as long as nothing is paid. If we paid them for access [to the land], they would be responsible. If this would stand up in court.....even our waivers.....you’ve seen the waivers before, who’s to know if they would be effective in court? [...] The most we can do is try to reduce liability” (Damien, July 16th, 2012).

Sarah is frequently tasked with the challenge of communicating with community partners of the GVTA, but she has fairly innovative ways of doing this. She believes that “it’s important these communications come from the community where it’s happening. [...] We don’t want people in Toronto, or Hamilton, or another city telling us what to do. I try to be sensitive to that, too.” (Sarah, August 1st, 2012). This suggests that she is sensitive to the context of place and interested in stimulating bottom-up communication initiatives. She also notes that “everything connects together”, suggesting that all activities carried out by the trail organization involve some elements of communicating a message to the outsider world (Sarah, August 1st, 2012).

In the TVTA, the communication issue has been thoroughly evaluated from multiple user perspectives. In particular, there are questions of *who* is using the trail, and *how* they are using it. Sebastian notes that they are unable to stop multiple uses of the trail because the user in question may be a landowner. In particular, All-Terrain Vehicle (ATV) use on the trails is a contentious issue. Sebastian tells me that:

“You’ll see some signs of ATV usage along the trails. I have mixed feelings about it. We don’t want ATVs on the property, as a matter of policy, but at the same time it may be the farmer who’s running the ATV for hunting, searching for wood, or whatnot. So we can’t really approach them and tell them to stop on the ATV, as we don’t really know who we’re dealing with” (Sebastian, July 24th, 2012).

Another major issue in the TVTA is conflicts between the trail organization and niche groups. In this case, it is geocachers who frustrate the trail organization members for going off-trail, not sharing information, and remaining individualistic in their recreational pursuits (personal communication, Sebastian, July 2012). Geocachers are recreationists that place hidden items in ‘caches’ for other people to find through the use of online GPS coordinates (personal communication, Sebastian, July 2012). Sebastian states:

“I’ve asked the people in our group who are geocachers if they’d like to lead a geocaching hike, and they’ve never been interested. It might just be their personalities- not exactly the type to go out with a group, they don’t like others knowing where the stashes are hidden, something like that” (Sebastian, July 24th, 2012).

Sebastian here suggests that the geocachers do not share the same mentality as the hiking clubs; he hints that they are solitary and not interested in pursuing group activities. Consequently, there are value differences in how the trail is perceived and used by certain members within the organization, and those who are geocachers might be falling into the ‘other’ category of users. The failure to communicate with novel types of stakeholders could be contributing to the issue of empty roles in the organization, discussed next.

4.5.3 Empty roles and limited membership

The trail organizations are each missing people for certain roles, some more critical than others. During the early phases of this research, for example, the GVTA was without a President. These positions can be left vacant at either the upper (e.g. Secretary, Treasurer) or lower (e.g. Trail Captain, Hike Leader) tiers of bureaucracy within the groups.

Martina of the Avon Trail indicates that they have a hard time attracting and retaining dedicated volunteers. She explains that they “have a high volunteer turnover [but] the increasingly formal nature of our association allows us to have new people move into the organization over time” (Martina, July 9th, 2012). She believes that formal job descriptions will keep volunteers on-staff, while marketing will attract new membership. Martina notes that “our website has a high number of visitors on a per month basis and we feel that we are quite well known within multiple municipalities” (Martina, July 9th, 2012). Although this is a long and uphill battle to spread the word about their organization, she sees only progress on this front.

In contrast, Charlie suggests that constant volunteer turnover is based on the personality of trail organization members – as does Joseph, who seconds Charlie in also suggesting that personalities determine the success of the organization. In the case of maintenance, at least, Charlie suggests that dividing the trail up into 16 different sections and appointing maintenance people to care for them was wrong because “the personalities didn’t fit the job” (Charlie, July 18th, 2012). Consequently, “everybody has different ideas, or didn’t catch onto what was needed” (Charlie, July 18th, 2012). This statement suggests that the maintenance of the trail needs to be more cohesive and unified. Joseph suggests that finding “the right person to contact the landowners” is critical to the success of the organization and “to recognize that not everyone is going to be good at that” was a hard lesson for the Avon Trail to learn (Joseph, July 24th, 2012). Consequently, good interpersonal

and diplomacy skills are required from those volunteers parlaying with landowners and other external stakeholders.

Joseph also expresses a concern that people trained to be Hike Leaders are unwilling to take people out on the trails in guided hikes. He states:

“We don’t have very many Hike Leaders right now. Quite apart from the issue right now, of whether or not they’re certified, but just the willingness of folks to take the time to lead the hike, organize it, previewing the hike as it were to know that you’re not going to get lost and know where you’re going.” (Joseph, July 24th, 2012).

Consequently, the limited volunteer resources in these trail organization is negatively affecting their ability to manage the environmental resources along the trail, coordinate with new members, and provide services such as interpretive hikes. Since these are values of interest to the volunteer trail managers, they attempt to reach these goals by forming partnerships.

4.5.4 Desire for partnerships with other organizations

The trail organizations are keen to work with other organizations to provide value-added services. Martina of the Avon Trail describes her work with a partner groups in the local community. She describes how “the Stratford Field Naturalists have a comprehensive list of birds that can be seen on our trail, so we refer interested hikers to their website” (Martina, July 9th, 2012). This reduces time pressures on members of the Avon Trail Association, while simultaneously providing valuable services for hikers. Martina also discusses the use of partners for funding of the group’s activities. She describes how they wanted to “do interpretation along our trail with signs about the countryside. These signs would have cost us \$1,000 a piece, even though there was a sponsored program for signs from transportation and agricultural ministries with the government

of Ontario” (Martina, July 9th, 2012). Her comment indicates some difficulties in finding partners to fund her organization’s projects.

Sarah of the GVTA notes that diplomacy and constant contact are needed when dealing with partners, which can strain volunteer resources. She describes her desire to work with a high school teacher and his students to get them out on the trails; “I’ve known about this and we’ve wanted to do this since last March, he wanted to do trail maintenance with the kids but there have been some stumbling blocks [...] they’re not insurmountable, but they take time and people and commitment” (Sarah, August 1st, 2012). Her major challenge lies in setting up all the right meetings and staying in touch through email and phone. All of these are fairly major tasks, and the job has fallen almost entirely to her. Consequently, the job of partnering with other organizations requires (as with many other jobs) significant volunteer time and resources.

Sebastian of the TVTA suggests that partnering with educational institutions is essential to the functioning of his trail organization. In particular, he works with high school kids to teach them about hiking (e.g. through Hike Ontario’s *Safe Hiker* course). He explains one program which was particularly useful:

“We had teams of 4-5 per project, and we let the kids do much of the work. We had a couple of volunteers per group, we also had another- the bridge that was fallen down the hill back there, was actually built by some kids [...] The kids did get to build the second last bridge that we’ll come to, I was quite eager to get them out onto the trails so that they could see what volunteer-managed trails look like, since they were student leaders from across Canada” (Sebastian, July 24th, 2012).

This comment suggests that some trail organization members are eager to get students and young adults exposed to trail maintenance so that they might volunteer in the long-term. Sebastian notes that the problem with young people is that “they are always travelling, they’re very mobile,

next thing you know they're off to South Korea or BC. So you don't keep them for very long" and he goes on to say "you try to train a cadre of people, who have the skills you need, and they just can't give back" (Sebastian, July 24th, 2012). He has thus found himself to be divided between the value of keeping young people engaged versus their high turnover rates. The trail organizations respond by avoiding the recruitment of new and young people because they do not have the time or resources to attempt this goal.

4.5.5 Fear of bureaucracy creates avoidance

Volunteer trail managers believe that it is important to focus more resources on pertinent bureaucratic issues, though they also acknowledge that certain rules would require greater investments of volunteer time and effort. The emotion described here – i.e. fear or anxiety or stress – contrasts with the positive feelings expressed earlier around *helping out* and *achieving goals*. These emotions play into the complex feelings and interactions that the trail managers have towards and within their trail experience.

Charlie suggests that, although he personally does not enjoy fundraising, more effort should be focused on this endeavor. He notes: "fundraising, again, is not my thing [...] my main area of interest is in maintenance" (Charlie, July 18th, 2012). Charlie does believe, however, that "the Avon Trail needs to be better involved with [...] fundraising" because there is the constant need to fund maintenance tasks (e.g. rebuilding bridges) (Charlie, July 18th, 2012). He hints that more needs to be done in fundraising to promote a more cohesive length of trail, saying: "It was my feeling that trail preservation is all-important, and I was concerned for the whole length, not just my little section. I did feel that a number of things are not being done" (Charlie, July 18th, 2012).

Fostering new volunteers can also be a highly bureaucratic process which does not incite engagement on the part of trail organization members. It can be stressful to work with new people

because they may not work out – as Sarah tells me, she “unfortunately had the hard job of dismissing one [volunteer], who wasn’t showing up” (Sarah, August 1st, 2012). The trail organizations thus perceive constancy and resisting change as an ideal state in which to maintain their current, and known, volunteer base. However, this also cuts out those volunteers who could take on difficult tasks such as fundraising, talking to landowners, and so on.

Landowner relations are another difficult area in which the bureaucracy of rules and paperwork becomes too much for the trail managers. In particular, the dislike of bureaucracy causes them to take a stance of no involvement in conflicts between landowner and trail user. Joseph of the Avon Trail explains how they are struggling with an issue of foragers on the trail system:

“There’s another group that’s foraging on our trail. For commercial purpose, it’s a business which supplies local restaurants. [...] So that’s a complaint. But we have to be very delicate about how we deal with it. [...] Because what do we do, tell a landowner about it? He could just say ‘that’s the end of the trail’. So we’re in a very tricky position with these things. So our tactic is largely, lay low” (Joseph, July 24th, 2012).

Thus, the more public the trail becomes and the more users that are on it, “the more you jeopardize the whole existence of [the trail]” (Joseph, July 24th, 2012). Similarly, Josie ponders whether it is prudent to mediate problems or avoid them; “It’s always a little awkward too when a property changes hands- there is one school of thought that says leave things as they are unless there’s a problem, another that says we should appraise [the landowner] of our activities” (Josie, August 8th, 2012). The lack of control that the trail organizations have over their trail’s land area as a manageable ‘resource’ is limited by the legal authority of the private landowner. The resultant effect is that trail manager’s bow out of tackling the big issue of landowner relations. Josie states

that: “It’s a kinda funny issue, but generally we do have a list and contact them [the landowners] once a year so that they are aware we’re still there” (Josie, August 8th, 2012).

There are also concerns that “the wrong people go and talk to landowners, say things that upset landowners” which is a concern when members of the trail organization are not effectively communicating with each other and fail to present a united front to the public (Joseph, July 24th, 2012). This problem illustrates the politics inherent in place; the landowner has certain requirements and ideas about how their land will be used, and if the trail organizations do not adhere to this (e.g. by preventing foragers or ATVs from gaining access to private land), they are rejected from accessing that piece of property and must reroute their trail elsewhere.

Sebastian of the TVTA indicates that the trail organizations do not want to acquire land because of the bureaucracy involved in that task, even though the alternative requires an on-going relationship with private landowners. He explains this stance:

“One of the biggest issues during my time was that we had a behest from a couple who died, who were staunch trail supporters, they left us \$50,000 in their will. They wanted us to spend the money on land acquisition. But the Board of the time did not like that idea because we would have to worry about insuring it and paying taxes, which would have been a drain on the club finances. So the Treasurer of the time got it changed over to trail maintenance” (Sebastian, July 24th, 2012).

This decision has worked well for the TVTA, because it allowed them to get “engaged in a fairly ambitious period of infrastructure construction [...] and the buildings are all volunteer-constructed, so we got a lot of bang for our buck” (Sebastian, July 24th, 2012). This story suggested to me that the trail organizations will not (as with the Bruce Trail Conservancy) evolve into land management and stewardship bodies. Although these trails are great resources, the land on which they exist will remain private; Hike Ontario, which is responsible for the policy related to trails in

Ontario, wants to continue responding on an as-needed basis to private landowner concerns. This was made clear to me during my attendance at the yearly Hike Ontario Summit in 2012 and 2013.

Damien from the GVTA states that they try to minimize the use of legal documents where possible. When questioned about the use of legal documents between the trail group and private landowner, Damien says: “an agreement goes both ways. So the landowner will sign the right away to you, for the next 50 years, but it would create more problems than the handshake agreement” (Damien, July 16th, 2012). The casual ‘handshake’ agreement, in which the landowner provides verbal support towards the idea of a trail, is more flexible and has worked well for the trail organizations. Damien notes that one landowner “has a handshake agreement with us, and she knows that we are going to use her land, she’s okay with that” (Damien, July 16th, 2012). Taking on additional paperwork, or signing over certain rights to the landowner, is not regarded as a desirable option by the trail organizations.

An alternate problem lies with the trail organization’s Board, which is so busy dealing with bureaucracy that they have no time for the trail. This is largely due to the limited resources available to the trail groups. Damien discusses how the current Board does not have time for the trail: “in the Board meetings, people are not interested in talking about the trail system, there are so many other things going on [...] we are forgetting about the basic thing which is important, the trail!” (Damien, July 16th, 2012). He also notes that “some people [on the Board], they may hardly be on the trail though they may try to get out occasionally” (Damien, July 16th, 2012).

This disconnection could be leading to many of the problems which come up along the trail system and which are not adequately addressed by the trail organization as a whole – prompt communication between the Trail Captains, Trail Directors, and the Board is not a perfect system. The Trail Captains “look after 2-3 km of trail, do blazing” and contact the Trail Director when there is major work to be done along the trail (e.g. damaged trees, erosion along trail, etc.) (Damien, July

16th, 2012). The Trail Directors must then communicate with the Board and receive feedback about these problems, in a timely fashion to avert any major problems.

4.5.6 Rule-adherence as solution to problem(s)

The issue of rule-adherence comes up frequently in the interviews with trail managers. Trail maintenance follows a set of rules to create standards for operating a safe trail that can be trusted by all relevant stakeholders.

Hike Ontario, the umbrella organization for all the local trail organizations, is responsible for purchasing group insurance for its members (including the TVTA, GVTA, and Avon Trail) and in return these groups must adhere to certain specifications outlined by Hike Ontario. For example, the trail groups must have a Hike Ontario representative on their Board and all Hike Leaders must be certified under Hike Ontario (personal communication, Damien, July 2012). As Martina indicates, the trail groups work hard to “minimize the risks” associated with hiking by focusing on rigorous “standards for trail management and design” as outlined by other trails and Hike Ontario (Martina, July 9th, 2012). Damien explains that “there are no standards for trails, so for insurance, they go by the standards of the Bruce Trail” (Damien, July 16th, 2012).

Although the trail organizations attempt to reduce risk along the trails, thus decreasing their need for insurance coverage, there are other factors which affect hiking-related risk levels. Carrie of the Avon trail describes: “Since our members are older, well over 40, they are easily injured and we have to be careful about the trail for their sake” (Carrie, July 9th, 2012). Charlie emphasizes this point when he describes how he went about increasing the safety of stiles used by hikers to climb over fences:

“When it comes to stiles, I found that older people have a bit of difficulty on the general type of stile, which is called a ladder stile. [...] But I would like to see more step stiles because of

the old folk, and I'm one of them. [...] The steps give them so much more sense of security. To my mind, it worked out very well" (Charlie, July 18th, 2012).

The hikers involved in the trail organization are thus a central driver of the amount of risk along the trail, and consequently increase the type and number of rules along the trail. Although older hikers raise concerns from within the trail organization, hiker behavior raises concerns from the private landowner.

Damien describes the importance of rule-adherence in maintaining good relationships with landowners. He states that "liability is the landowner's greatest concern" (Damien, July 16th, 2012). However, when it comes to hikers the trail groups often have no control over their activities. Damien explains: "there are other hikers who walk off-trail on the landowner's field [...] sometimes they might push over the corn. And we aren't allowed to do that, we are supposed to stay 4 feet away from their property" (Damien, July 16th, 2012). This becomes a particular issue when young people are on the trails: "I think it's maybe bored students, parents don't take them on holidays, who have so many hours free, they damage our bridges [...] with spray paint" (Damien, July 16th, 2012). Josie explains a major problem, common to many of the trail groups, which affected a trail route for the TVTA:

"Though we did have an issue a few years ago, where there were hunters walking on the trails, with their dogs loose and guns. The landowner went out and saw the hunters, questioned them, and they said that they were a part of our group even though they weren't. So the landowner immediately called our president and said "that's it, you're no longer allowed on my land". So we had an awful lot of discussions, back and forth, that 'no those weren't our hikers'. Eventually I think we did a bit of a reroute around that area 'cause he just wasn't happy" (Josie, August 8th, 2012).

Rule-adherence is thus not only the domain of the trail organization as they must obtain insurance; it is also something that the trail organization must instill in the behavior of hikers to maintain access to privately-held land.

4.5.7 Long-term sustainability of the trail organization

Although many of the concerns raised in this section have identified challenges to the future of each trail organization, several interviewees explicitly refer to their concerns about its long-term viability. In my interview with Josh from the GVTA, he said: “I wonder how much longer the Avon Trail, the Grand Valley trails, the other trails, will actually exist” (Josh, August 1st, 2012). He goes on to explain the reason behind this pronouncement:

“It’s not just because there seems to be a dwindling number of volunteers. But there’s also a lot of landowners who’re scared silly that someone will step a foot wrong on their property- so the answer is ‘no’ you can’t come on my land” (Josh, August 1st, 2012).

Josh is certainly not alone in his perception that limited volunteer resources and problematic landowner relations could lead to a disintegration of the trail and trail organization. Damien believes that this disintegration could come from within the Board. Damien explains how:

“We had a fellow, who said he wouldn’t mind, and he came a few times to the Board meetings. But then he didn’t come back. There have been people with interest in the Board in the past, but they don’t follow through” (Damien, July 16th, 2012).

He goes on to say that “if there isn’t enough support into the future, to look after the trail, then maybe we turn into an outdoor club, which would mean that our trail would be disbanded” (Damien, July 16th, 2012).

Members of the TVTA also express this concern when they comment on the restrictions being placed on access to certain trails within London as a result of Environmental Sensitive Areas

(ESA) legislation which requires them to move out of sensitive natural areas (City of London, 2012). Sebastian explains the TVTA's initial thoughts with this legislation: "From our perspective, we weren't against them reducing the number of trails. But we were upset that they were going to cut off our trails" (Sebastian, July 24th, 2012). The TVTA pressed for answers but received only the vague response: "wherever they found something ecologically sensitive, they were going to close trails" (Sebastian, July 24th, 2012).

Consequently, some of the politics of place came to the fore as Sebastian suggests that their "trails precede the multi-use trails in London", which refers to the group's long-standing association with the London trail system and environment. Josie suggests to me in our interview that "our biggest issue lately has been the ESA closure business and that has been resolved somewhat" (Josie, August 8th, 2012). Although the closure of certain environmentally-sensitive areas is an issue, the groups seem to have dealt with the uncertainty and reached a point at which they feel comfortable adapting to the changes in their 'place'.

From my conversations with them, it appears that the volunteer trail managers are concerned about the long-term sustainability of their trail for a variety of reasons. Although this does not necessarily mean that they view the trail negatively, there are some negative connotations around the current functioning of the Board. However, many people from the organizations have indicated that the Board goes through cycles and things can change in this regard quite quickly.

4.6 Behaviors and Emotions towards the Trail Experience

In this final set of two themes, the volunteer trail managers vision some alternatives for their trail experience. They describe several alternative methods of trail management and propose ways to cater to specific human needs through hiking. Both themes suggest that the volunteer trail

manager's connection to the trail environment could be strengthened through more interaction with nature.

4.6.1 Alternative methods of trail management

This section describes the ways that the trail organizations could evolve to better support the needs and desires of stakeholders. These needs and desires range from a balance of the spontaneous and practical, to greater access to public land, to a more holistic view of the entire trail.

First, Charlie of the Avon trail thinks that hiking should be a habit – done with regularity every Tuesday – as well as spontaneous and practical. He describes how he first got involved in the group and its maintenance activities: “when we meet, for the Tuesday walks, we decide what to do then and there” (Charlie, July 18th, 2012). He then states: “I’ve turned it into a reconnoiter [...] I’d pick a section of trail that the people could walk on, and we’d just walk it. I would take notes of what’s needed, the blazing, excess growth, damage to bridges” (Charlie, July 18th, 2012). The spontaneity of the hike keeps it fresh and exciting for members; when I participated in one of these Tuesday hikes, I found the unexpected nature of the trail and its maintenance needs (including one wrong turn that had us briefly lost in a field) to add to the excitement of the hike. These exciting and hands-on experiences on the trails brought me closer to the trail environment and I felt this hike was one of my more engaging research experiences (Turner, 1973).

Josh of the GVTA venerates the ‘hiker’s footpath’ and sacred rites of passage over private land in other countries. He describes that “It’s not fool proof in the UK [United Kingdom], but you have the right to walk anywhere [...] over here, some farmers are so friendly to walkers. And yet, for every farmer that is like that, there’s probably three other landowners where they say ‘there’s no way you’re going to put a foot on my land’” (Josh, August 1st, 2012). Consequently, there is the need

for more progressive government policies to financially support the opening of trails onto private land. Josh comments: “On paper, [the City of Kitchener] have 10 or 15 years of trail and park related things, parks for children, things that are on the books and have been approved in principal. And almost no money every year to do it” (Josh, August 1st, 2012).

Several volunteer trail managers emphasize the importance of keeping the trail ecologically functional at a broader scale. Sebastian suggests that trails as a whole should not be undertaking excessive management practices, but rather leaving nature to do its own thing. He is firm in his perspective on maintenance activities, and tells me that, “we try not to remove too many trees along the trail” (Sebastian, July 24th, 2012). Tim and Doreen agree, stating that “other erosion will be natural erosion and we just try to deal with that as it happens”; undertaking more vigorous maintenance of the trail would be excessive and there is a need to instead focus on areas impacted by horses and ATVs (Tim and Doreen, August 17th, 2012). Sebastian also encourages a usage policy in which hikers using the trail keep it maintained; “the more people that use it [the trail], the better it stays maintained” (Sebastian, July 24th, 2012). This kind of perspective encourages public appreciation of the trail and cuts back on maintenance costs, while also ensuring that excessive maintenance practices (e.g. cutting down sickly trees) do not have to come from within the trail organization.

Josie shares this opinion, and further states that hikers can contribute to the sustainability of Environmentally Sensitive Areas (ESAs) in London. She believes that having hikers on the trails helps to patrol them, something that the city would have to finance privately otherwise. Thus, she does not see the value in keeping hikers out of nature:

“Because we as hikers stay on the trail, we don’t pick flowers, and so on. In fact, one of our positions was that, with regards to the ESAs, people don’t know much about them. So if it wasn’t for us talking about them and making people aware, they wouldn’t even know

about these lovely places. The cutbacks in the city are such that there's nobody from the city going and checking what's happening in the ESAs, so we're doing them a bit of a favor by hiking through there every once in a while, letting them know if anyone puts in a fence or made a ramp for biking and stuff, then we'd inform them right away. They wouldn't know necessarily otherwise" (Josie, August 8th, 2012).

These perspectives indicate that hikes need to be both spontaneous and regular; that there is a need for higher-level changes to allow hiking on private land in Canada; and that there can be many benefits to allowing people to use trails.

4.6.2 Catering to specific volunteer views

The trail managers expressed fairly divergent views about their role in the organization, often with reference to specific management activities. Charlie of the Avon Trail expresses some upset that there have been divisions made between different sections of the trail, and this relates primarily to his maintenance work for the group. He states, "they divided the trail up [...] and appointed monitors to each section [...] which is fine to a point, but I felt that the trail became 16 different trails, with no continuity" (Charlie, July 18th, 2012). This complaint negatively impacts how Charlie perceives the trail, which negatively impacts his hiking experience and maintenance work. He elaborates that these divisions in the trail created differences "in the style of blazing, degree of maintenance, and it also turns out to be very theoretical because people weren't following through", resulting in sections of trail which were under maintained or ignored (Charlie, July 18th, 2012).

Tim and Doreen state that there are variations to the needs of the trail and the abilities of trail captains, but there are no attempts to standardize things in the TVTA – and that's how they want the organization to function. Tim describes the state of maintenance activities along the TVT: "we've got 16 Trail Captains, and we don't need much [maintenance] in the city of course. The hard

work's down at both the north and south" (Tim and Doreen, August 17th, 2012). As with the Avon Trail, the TVT requires 16 Trail Captains to go out and monitor their section of trail and report back to the Trail Directors. Tim goes on, "basically we leave each Trail Captain to do their thing [...] other Captains just do a report and they have separate maintenance people. It varies a lot- we don't attempt to standardize things" (Tim and Doreen, August 17th, 2012). Consequently, they let each Trail Captain decide how best to manage their part of the trail, and there are no concerns that this decreases the state of the trail as a whole.

For Danielle of the GVTA, she feels that the group is not responding to her needs to hike locally and schedule at times she is more interested in hiking, and on a regular basis. Danielle describes that she belongs "to another group that hikes, mostly retired women that hike on Wednesday morning" (Danielle, August 10th, 2012). This group provides her with an alternative idea of what hiking should be like. She says she does not often hike with the GVTA because "the hikes are often on weekends, when I don't often hike [...] and they're usually too long [...] and the other thing is, there isn't much regularity" (Danielle, August 10th, 2012). These concerns mean that she is not in touch with the trail itself, even though she is heavily involved in Board activities.

Josh of the GVTA adds that many people prefer a slow pace and want to avoid bad weather during their hikes. He describes how a group of hikers he took out "gave me some feedback, so this fall I'm doing real short hikes" (Josh, August 1st, 2012). He also has had some experiences where he "postponed a hike because of the heat - the other time I postponed it was because of a snowstorm" (Josh, August 1st, 2012). Consequently, Hike Leaders must also cater to the hiker's needs.

The TVTA is responding to hiker's needs by easing the public into higher levels of involvement in the group through easy, short, early-Saturday morning hikes within the city of London. Josie describes how they try to be very responsive to public needs for hiking: "let's say there was a request for a certain kind of hike, then I would bring it up with Hike Leaders" (Josie,

August 8th, 2012). This system of responsive consideration for the public's needs has inspired the TVTA to partner with the Middlesex Health Unit for the Saturday morning hikes, which Josie describes: "a lot of it is in-town, and only about an hour long [...] lots of people start with our organization in this activity, it's also friendly in terms of strollers and kids" (Josie, August 8th, 2012). This makes it a fun, approachable, family activity which moves away from the framing of hiking as an intense, long-term activity that can only be performed when you have the proper equipment and expertise. Consequently, a lot more people from the general public are able to participate in these hikes, which are also close to their homes and other activities. This raises the profile and value of the TVTA while also encouraging people to learn about their local environment and recreational trails.

4.7 Summary

This section has covered the themes around the elements of sense of place which are common between volunteer trail managers. I have covered the meanings that participant's seem to ascribe to the trail and trail organization; identified some of the connections and relationships that they feel towards the trail; highlighted the management activities and challenges which impede the organization's sustainability; and lastly, identified some management changes and hiking activities as potential alternatives to the current situation in the trail organizations.

From these themes, I created an exhaustive description, or narrative, that encapsulates the common experiences of the volunteer trail managers. It is told from my perspective during a hike I participated in with the Avon Trail, though elements from the interviews are drawn into the largely fictional account. Key themes are **bolded** for clarity. Thereafter, I lay out my findings as they relate to the existing literature.

Chapter 5

Discussion: The Story from my Hikes

In this section, I will provide the reader with a view into the lived experiences of a volunteer trail manager as they hike the trail and reflect on the experiences of dealing with the trail organization. It is a fictional account, but based loosely on my own hike of the Avon Trail. Please note that people have been assigned alternative names for confidentiality.

Standing at the trail head, I take a moment to absorb the feeling of anticipation shivering through my calves and knees at the coming onslaught. The terrain for the trail, from what I have seen and heard about it, is intense and requires a full water bottle, tough shoes, and a cell phone with enhanced reception powers. This hike takes place out in the boonies and doesn't go lightly on newcomers. Those who aren't seasoned to the hiking experience will likely not complete the laborious exercise, and will turn back well before the Hike Leader makes the final push homewards.

I recall other times where I was much more relaxed, and the term 'hiking' was more akin to the daily exercise of 'walking'. Some people distinguish between these two, I know. One gentleman in my group defines hiking as an activity involving pre-meditated routes and equipment, while walking involves the generalized activity of movement towards a defined end-goal. When I walk, I tend to associate it with urban areas, dog walkers, and baby strollers – extraneous items which are left behind on this kind of hike. Here, I can see my fellow hikers suiting up with gallons of water contained in coloured water bottles; extending and reinforcing their hiking poles; tying and retying shoe laces. They are clearly well-prepared.

*A blast of hot summer air hits me in the face and I glory in the rich smell of countryside, a tangible, weighty scent that erodes the tension in my back and shoulders from my time sitting in front of a computer. I can **feel free when I'm hiking**; my mental abilities are sharper, and my eyes seem to*

pick out more of the surrounding landscape. My physical aptitude also peaks with every lift and push of my thigh muscles. I stretch out these muscles as I meditate, feeling relaxed and excited for the coming hike. I haven't had to do any of the planning – that has all been left up to the Hike Leader.

“Hi everyone, my name is Jessica,” the Hike Leader appears from behind her car, and the scattered group shuffles into a rough semi-circle, expressions of interest on their faces. “Today we’re going to be hiking the Pinnacle section of the Grand Valley Trail. It’s a beautiful spot. Since it’s a hot day, I hope that everyone has sufficient water.”

Everyone nods in agreement, and I feel my hand tighten around the coolness of my water bottle. I recall one hike where I foolishly came unprepared, leaving my water bottle in the car. I suffered through the exhausting heat and returned feeling light-headed. That was the first and last four-hour hike in which I ever went without water.

“Can everyone please sign into the hike on this sheet?” Jessica waves a clip board into the air, simultaneously handing it to the first person in the circle and equipping them with a pen. “And then we’ll do introductions.”

*As the clip board moves slowly around the circle, my muscles quiver in anticipation. I hate the waiting; I would much rather be on my own. I can’t help it if I have **specific views that need to be catered to**, though I do appreciate having the landscape interpreted for me. I don’t like the wait to begin the hike, the fact that I had to drive for so long to get all the way out to this random starting point, the fact that it isn’t earlier in the morning. Already, the sun appears at its zenith and there’s sweat pouring down my face.*

The clip board finally returns to Jessica and each person around the circle counts off and gives their name. We have a total of 11 people, large for a GVTA hike. Grey and white hair shimmers under baseball caps and sunglasses; my youthful blonde hair, pulled back into a pony tail, is an anomaly. Everyone is wearing way too much clothing, in my opinion, but I can see that they are surreptitiously

spraying on bug repellent. Protecting yourself on the trails is important, I suppose, but I prefer to take the consequences as they arise.

“All right, everyone, let’s head out!” Jessica dispenses of any formal announcements about the trail environment, or proper etiquette, in favor of starting the hike. I am in favor, but also question what is missed by those present who have never participated in a GVTA hike before. I wonder if the social example of their peers will mean that they stay on the main trail. Most likely, this will be the case. The majority of hikers present appear to be veteran hikers, anyways. They mostly stare straight ahead at the path to watch for tripping hazards (I try to, as well, though I’m also distracted by my meditations enough that I trip several times), swinging their arms briskly and bringing their hiking poles down with a sharp retort on the warm brown earth.

*If this were a group of new hikers – a phenomenon which I have previously experienced, myself being an inexperienced hiker at one point in time – they would be commenting on the flowers and perhaps the vistas. The signs are a source of wonderment to me, but for the most part the hikers seem to ignore these. I find in each hike an **opportunity to appreciate the environment**, and I savor it throughout the hike. I also really enjoy when the Hike Leader stops and points out different plants along the trail.*

***Sharing my love of nature** with those I hike beside or behind me is tough, but rewarding. It’s tough to share the feelings I have towards nature because they’re so vague; I can barely explain the thoughts and emotions that I have towards the trail to myself. However, I know that if I were a maintenance worker along the trail I’d feel differently. As a **maintenance worker, I would feel like I own that section of trail** because I’ve spent so much time on it. As we hike, I can pick out tree branches which have been lovingly pruned back to allow hikers to pass safely along the trail; I can see the dedication hammered into each nail on the stiles over the fences; I can feel the sturdiness of the*

bridges I pass over. Each of these has been erected, monitored, and maintained by an individual Trail Captain focused on that section of trail.

Jessica, our Hike Leader, pauses at the top of a small embankment overlooking a rolling pasture. The verdant green grasses below, combined with the swaying of the majestically tall trees, inspires me to pause and savor the moment. Everyone does, as it's time for a brief break in our exertions. Most people shed several layers of clothing, and we morph into a group of nomads, hiking across an unknown land as lumpen and misshapen figures, clothes around our hips and large hats obscuring our faces.

*Jessica goes around chatting with everyone, making sure that they're feeling okay and are enjoying the pace of the hike. Her consideration for everyone is a mark of her excellence as a Hike Leader. I can tell that she's enjoying her time leading the hike and identifying focal points for people around the immediate area. I can imagine **how nice it must feel for her to help out** with the group as a volunteer. I know that the hiking groups, as a whole, are suffering from a shortage of people willing to organize and lead regular hikes.*

"Hi Jessica," I say as she passes by my little point of observation. I'm standing next to a juniper bush, and the birds are twittering at me from within its pointy, bristly, conical shape. "How are you doing today?"

"Very well, thanks!" She smiles largely at me and carries onto the next person. I'm glad that we've had this chance to greet each other, short as it was.

Snacks, water bottles, and fruit drinks begin to appear in people's hands and they chat amicably over their sustenance. We haven't been hiking for very long, but I can tell that the heat is taking an additional strain on people. The water is consumed a little too fast for some, and I notice people sharing their water bottles without reserve. I can tell that, for the most part, the people know each other and are comfortable with each other. In some cases they have brought along a new friend

or family member, who looks a little more mystified and nervous about everything than the seasoned regulars. Overall, I get a sense that **the physical activity of hiking is complemented by the social elements** that people develop during their involvement in the group.

“Alright, everyone, let’s move out!” Jessica calls. She wants to get the attention of all the hikers – some people have discreetly wandered off into the bushes to relieve themselves. It’s standard practice that the ‘boys’ find a place that is separate from the ‘girls’ for this purpose; consequently, the group has divided slightly to allow each gender privacy. Jessica’s call effectively rouses everyone, however, and they form a vague line behind her at the start of the next section of trail.

“I really wish that we didn’t have to cover the next section of trail,” someone behind me, whose name I do not know, comments. “It’s going to be all roads, and in this heat it’ll just be so uncomfortable. So much nicer if we could stay in the forest here! But the landowner who owns the property won’t let us go through it.”

“Why not?” Another lady, clearly known to the woman behind me, asks in a loud voice. “Surely she realizes that we’re just hiking.” She rolls out the word hiking like it’s an activity approved by the heavenly saints. Her friend nods in agreement.

“I know, right? But I’ve heard that she doesn’t like the thought of people walking across her land. Too much liability, that kind of thing. Just made her nervous.” I reflect on this statement as we begin to move back onto the trail. There’s likely more to the issue than simple liability; the fact is that the volunteer trail organizations really struggle to **adequately communicate with other stakeholders**. In particular, landowner relations can become quite strained when consistent, accurate, and timely information isn’t provided to them. The volunteer trail organizations **don’t always have sufficient volunteer help** to keep these lines of communication open, and things end up falling by the wayside. In some cases the position for Landowner Relations Coordinator might be vacant, given that there are often also **empty roles** at the Board level.

*I honestly can't blame the members of the trail organizations for avoiding the bureaucracy involved at the Board level. I know that the maintenance workers along the trail have a pretty good time of it; they get to be social and active, without the responsibility associated with managing a volunteer, not-for-profit, incorporated organization. Who would want to be stuck doing all the unpleasant paper work and public relations activities, if they could instead be out hiking the trails? I stop myself right there. I'm thinking from my own perspective. Some people might like participating in the bureaucracy of the Board. They might just deal with the stress of this bureaucracy by **avoiding certain issues or rigorously adhering to rules to avoid further complications** associated with the trail.*

We have reached the road portion of our hike. The sensation of coolness generated by the trees and the slight breeze from within the forested part of the path evaporates in the stark heat of the road. I can see waves of heat rising up off the black asphalt, the humidity like a damp cloth on my forehead. Jessica keeps plowing ahead; there is a 'sweep' at the end of the row of hikers to ensure that no one falls behind or feels unwell in the heat. A sweep is someone designated to make sure that the group stays together, thus reducing the work of the Hike Leader. In larger crowds of hikers, I know that more than one sweep will come along and might stand along sections of the trail to point people in the correct direction. No one stays together during the hike. We have all broken down into little clusters of two or three people. I'm still walking along meditatively, alone, enjoying the peace this aura of space around me brings.

My meditations bring to me to the startling realization that the trail organizations are in trouble. They are short on volunteer assistance, which makes everything more challenging. It makes it hard to find Hike Leaders and sweeps to take people out on guided hikes; they're short on trail maintenance workers; and they're short on people for all roles in the Board. The Board needs people to help with advertising, landowner relations, and finances, amongst other things. Without volunteer

support, they can't even **partner with other organizations**, because it would require time and energy investments from dedicated individuals. I worry that these major barriers could negatively impact the **long-term viability of the trail and its organization**.

We slip back into a wooded section of the trail, away from the road. The relief from the heat is immediate. I can hear audible sighs behind me and a smile breaks out on my face when I hear the burble of a nearby brook. Nature cocoons around me and I feel a strong spurt of joy in my chest. The other hikers are also happy and relaxing after the tension of the road – a tension created by crossing busy car-dominated roads, the heat, and the monotonous scenery.

Jessica leads us deeper into the woods, and about 20 feet into the bush I can see a sign for the GVTA marking out our trail. I find it interesting that the trail is hidden so deep within the woods, far from the road where it would be visible to all and sundry driving by. However, I know that this is a precaution on the part of the trail groups. They don't want to attract motorized vehicles onto the trail by advertising themselves so obviously; they wouldn't want to upset the landowner by generating potentially improper uses of their land. These 'other' types of uses of the land could come from anywhere, but I know that the trail groups are inclined to perceive **insiders versus outsiders to their organizations**. Insiders are those experienced hikers who are 'in the know' and they are mostly outdoorsy, rural, and follow the rules of the trail. Outsiders tend to be landowners, municipalities, niche activity types, and general urban folk who don't understand the culture surrounding hiking.

"Do I understand the hiking culture?" I speak the words out softly under my breath and let the wind catch them away. I realize that I'm not in any position to answer that question. I don't associate with the group enough as a social unit to know if I'm following all of the expected social norms in the hiking process. I still feel like a bit of an 'outsider' to the group.

Consequently, signs don't always make sense to me or the rationale behind erecting a sign is often lost on me. **Signs provide me with critical information when I'm hiking**, ranging from safety

to general orientation. I notice the signs don't have a 'hiker's code' of any sort indicating the standard rules. I seem to dimly recall being told that the brochures for each organization explain this information – but I failed to bring my brochure along, and as far as I know they don't have smartphone applications describing this information. Not that I'd want to pull out a smartphone and ruin my outdoor experience, anyways.

“Okay, hikers,” Jessica calls out to the group. “Here is a local landmark of sorts, which I’m hoping that everyone will want to take a picture of,” she pauses to throw her arm out in a half-circle, encompassing what look to be the ruins of a building. “This used to be a mill, established in 1934 by.....” her voice fades in my mind as my attention wanders off to focus on the building. The hikers around me are all stopping to snap a picture of the ruins, perhaps as much for the physical break as out of interest. I imagine that most of them have already seen this local cultural landmark. Personally, **I feel that learning about the local environment is important to my involvement in these hikes.** I’m glad that Jessica has taken the time to talk about the mill.

“That was a fascinating story,” Amanda congratulates Jessica as we start hiking again. Everyone has fallen back into a general line and this time, I’m at the front. “You think that the city is aware of that ruin? I hope that it’s protected.”

Jessica smiles and starts to talk about the current planning issues facing the old ruins. I am impressed by her knowledge. I like to think that she started out as a Hike Leader not knowing too much about the local area, but set herself the goal of teaching others; and now she **feels good about achieving those goals.** I murmur my own words of thanks, in tandem with Amanda, when she’s done explaining. My sense that the hike is value-added and offers me benefits as a hiker has increased. I’ve practically forgotten about the difficulty of hiking along the road and am ready for my next hike. I can tell from my watch that we’ve been hiking for 3 ½ hours, which means that we’re almost back to the spot where we started out.

*"I hope that on the next hike we'll get to go somewhere new," Amanda comments to me as she hikes ahead of me. Jessica has pulled ahead for the final leg of the hike and is out of hearing range. "I'm pretty tired of hiking along this part of the trail, nice as it is. A little bit of spontaneity would be appreciated." I'm surprised to hear someone give this opinion, but nod my agreement. Most people that I've talked to are hoping to stay locally and on the same trail; regularity is the key. But I suppose that there are likely **alternative desires amongst the hikers to see new locations and possibly even different forms of trail management.***

"Everyone, we've made it back to the starting point. Good job to you all!" Jessica has reached her car and is flicking open the trunk. Inside, more water bottles nestle coolly against ice packs sweating condensation. A few people gather around her car to snatch up a few hungry sips of water before dispersing to their own transportation.

I smile and wave at the few people that I've seen before on the hikes and head off to my own car. My mind feels completely relaxed and contemplative from the hike; I feel that I've discovered a lot from my musings amongst the other hikers. My legs, in contrast, are pulsing with blood and my feet are tired from being stuffed in hiking boots for so many hours. I know that I can anticipate a hot bath that evening and another great hike in the very near future.

5.1 Discussion: Implications of the Interview Themes

In this section, I will cover the implications of the interview themes as they connect to the literature. To remind the reader, my purpose here has been to describe the common elements of sense of place in the lived, daily experiences of volunteer trail managers. Through a variety of processes and interacting factors, individuals can develop a sense of place – realized as a collection of meanings, beliefs, symbols, values, and feelings – towards a particular locality (e.g. a trail) and/or a symbolic entity (e.g. a group of people) (Lefebvre, 1974/1991; Williams & Stewart, 1998).

The opening paragraphs to the introduction of this thesis (chapter 1) suggest that challenges in trail management are the driving force bringing the groups together to discuss the personal and societal implications of the trail environment. Many positive elements also draw together the experiences of the volunteer trail manager, ranging from appreciating the environment to helping out or achieving goals. This section will explore my findings under the headings of my sub-questions (chapter 1.5), with the exception of the final (#5) sub-question on how sense of place might help to overcome differences in perceptions, values, and uses of the trail. This question will be explored in the conclusions (chapter 6) portion of this thesis.

5.1.1 How does the volunteer trail manager perceive the trail should be used by stakeholders?

An individual's motivations for getting involved in a volunteer organization can have an impact on their perceptions and behaviors within that role (Clary & Snyder, 1999). Common elements driving people to get and stay involved with volunteer trail management include: interest in the local environment, enjoyment of the trail/hiking as a social-recreational space, and volunteering alongside family members and friends.

Volunteer trail managers discussed the importance of the local environment to their involvement in the trail organization. Notwithstanding the fact that many of them were also retired

at the time of their involvement and able to devote more time to trail management, they also wanted to interact with features of the local environment, as described by Joseph and Danielle. Charlie suggested that information about the local is valuable and should be communicated through written documentation. Sarah used the concept of the local to draw a community together around the trail – drawing together the physical and social aspects of sense of place and suggesting that the image of the trail holds symbolic power (Deutsch, et al. 2013; Roger & Graefe, 1994).

Use of the word 'local' in the interviews suggests that the volunteers engage with this concept as an emotional standing point and frame for their interpretation of the trail environment (Tuan, 1980). It is *their* trail – a landscape that has brought them awareness of environmental and social features of their community, with the additional interpretation and social structure provided by the trail management organization. Turning the word 'local' into a battle cry for drawing in new volunteers is their attempt to communicate the essence of the trail's importance to them, though it also draws lines between accepted insider and undesirable outsider groups. Trail members express hope that the local framework could stimulate nearby communities to act and provide financial and volunteer support to the trail (Davenport & Anderson, 2005). The local concept is a particularly strong emotional appeal in a world of rapid globalization and the human desire for intimate connections with others and with physical spaces (Casey, 1997; Gruenwald, 2003; Lewicka, 2011).

Participants expressed an interest in enjoying the trail as a social-recreational space, and suggested this was one of their major reasons for volunteering. In this light, the trail provides physical exercise and social stimulation in the presence of family and the larger community. Carrie values her hiking experiences because she can be both independent and social, depending on her preference. Charlie highlights the importance of the social to his hard work out on the trails with his maintenance team. Similarly, Joseph and Damien both talk about their enjoyment of volunteering alongside family members and the camaraderie shared between volunteers in the trail

organization. Hiking and trail maintenance are thus thought of as social constructions in which shared behaviors and activities take place (Stedman, 2003). The trail and its organization are also expected to provide value to both the community and the individual.

5.1.2 What does the volunteer think about their trail experience? What are their emotions towards the trail experience?

Participants suggest that the trail makes them think about and feel like admiring the beauty of nature and escaping the mental tasks of daily life. Sense of place involves both cognitive and emotional connections created through personal experiences, social phenomenon, and individual interpretations (Davenport & Anderson, 2005). These core foci for the trail managers have implications for how they relate to the trail and guide its evolution.

Participants indicated that they enjoy the trail because it allows them to appreciate nature. Tim and Doreen wanted to interact with the flora along the trail by hiking; Damien expressed his love for the trees, flowers, and vistas along the trail. Hiking was the method sought out by these individuals as a way to interact with specific features of the landscape as well as broader vistas.

Physical features of the landscape, as they relate to sense of place, have been investigated in the literature at multiple levels of abstraction and with implications for trail design (Arnberger & Eder, 2011; Scannell & Gifford, 2010). Scannell and Gifford (2010) suggested that abstract ideas about places such as countries relied on physical factors in the formation of place, whereas more local places (e.g. communities) relied on social factors. In the previous question, social aspects of the trail were closely connected to ideas about the local for participants, as illustrated by the influence of family togetherness and community building during trail maintenance activities. Trails designed for those more interested in physical features focus on preservation of the landscape and limits to the amount of maintenance performed within those natural landscapes.

Lastly, the trail made participants feel like they were able to escape the mental strains of daily life through hiking. This suggests that the individual was able to enjoy a satisfactory experience; they had the proper pre-expectations for the hike, and the landscape fulfilled their need for freedom from the status quo (Chhetri, et al. 2004; Dowart, et al. 2010). These variables link to place dependence, because the trail comes to fulfill the user's actual need – based on their pursuit of stress release – for this specific recreational activity (Roger & Graefe, 1994). In providing this sort of positive and lifestyle-affirming feedback, the trail also fulfills elements of place identity for the individual by providing a sanctuary and refuge (Spartz & Shaw, 2011).

Damien describes his desire to get out on the trails because it is great for his mental state, allowing him to let his mind wander. Joseph enjoys the new experiences provided by hiking, suggesting an element of spontaneity in his hiking activities. Charlie motivates himself to get out regularly every Tuesday for a hike along new sections of the trail. For Sebastian, getting outside in all different seasons is good for seeing everything nature has to offer. Consequently, it is important that hiking and trail activities retain a certain level of spontaneity or newness for the hiker or volunteer trail manager. New volunteers are also more likely to become emotionally involved with the trail experience if they have the opportunity to hike frequently and regard the physical and social space represented by the trail (not organizational bureaucracy) as their priority.

5.1.3 What aspects of the trail manager's identity are based out of their trail experience?

Participants identified feelings of possession towards the trail environment, sharing/shared love of nature, outsiders versus insiders, goal achieving, and helping out a volunteer organization as some of their personal narratives around the importance of the trail experience to their lives. Volunteers require sufficient rewards to remain engaged in an organization, and identifying the highlights of their participation could aid long-term volunteer retention (Bruyere & Rappe, 2007).

Damien and Sebastian both note that trail maintenance workers feel a particular sense of possession towards the trail because they have access to the land for their personal enjoyment and physical activity (i.e. maintenance work). Recreation in the form of maintenance work has contributed to both Damien and Sebastian's sense that the trail is a place that they go to have access to land, perform certain activities in that space, and communicate with others about their identity as a trail maintenance worker (Kruger, 2006; Relph, 1976). Their attitude and behaviors suggest that they enjoy taking control of the landscape of the trail and making it into a resource for others to enjoy (Kruger, 2006). Consequently, they will remain involved in the organization only so long as they can have that direct and stimulating contact with the trail.

When the trail managers share their love of nature along the trail with others, they learn and evolve themselves as well as address the negative impacts of human use. Joseph describes how he learned more about the trail environment by leading a hike; similarly, Damien's guided hike gave him a fresh take on the trail's environmental features. Sebastian specifically targets and appeals to young people as trail maintenance workers of the future. However, Sebastian is also concerned that bringing people onto the trails introduces environmental impacts such as invasive species and greater management action to reduce risk – a fear backed up by the literature (e.g. Hill & Pickering, 2006; McEwen & Ross, 1976; Nepal & Way, 2007).

Others, like Tim and Doreen, suggest that informal trails are an inevitably, especially in urban areas, and properly planning them for non-sensitive environments is important. Tim and Doreen also emphasize the need to prevent unreasonable use by humans (e.g. motorized usage). This includes people in the complex dynamic of natural resource management; informed management action must be taken when attempting to balance people's desire to recreate in natural spaces with the sensitivity of those environments (Hanna & Slocombe, 2007). Volunteer

trail organizations are in a particularly delicate position because they are subject to the rules of the dominant management authority and cannot undertake certain actions along the trails.

It is important, therefore, for trail management plans to be developed in partnership with all local stakeholders and the government. The attitudes and perspectives of local communities must contribute to these management plans to avoid negative feedback. Tourism revenues can be used to justify the difficulty and challenge involved in these complex planning procedures. Attractive recreational hiking trails are desirable for tourists travelling to an area, and the government should acknowledge the contributions of volunteer-run trails to this low-cost tourist draw (Fennell, 1999). Identifying the tangible contribution of volunteer-managed trails to tourism revenues could also add weight to campaigns for financial incentives to landowners who open their land for public hiking. Additionally, the City of London's (2012) treatment of trails within ESA's can provide guidance on how to rank environmental sensitivity, develop trail standards, zone for different types of use, and garner public opinion on how to protect sensitive natural ecosystems while allowing for equal access to green space. Interpretive trails and more communication between the trail organizations and the general public about their management activities would contribute significantly to this goal.

Stakeholders 'outside' the trail organizations are often blamed for problems along the trail, despite the fact that trail organization members are eager to share their love of nature and desperate to gain more volunteer support. Volunteer trail managers indicated that insiders to the hiking group were rural, skilled, local, responsible/experienced hikers, and physically active, while outsiders were urban, non-hikers, or different stakeholders' altogether. Martina hinted that outside hikers were not desirable on their trail, while Charlie suggested that he likes his existing crop of maintenance workers. Non-hikers were thought to introduce strain to the relationship between the organization and the landowner, as discussed by Joseph. Landowners were identified by Sebastian

as an outsider group, while Damien suggested novice hikers and municipalities also fit this role. Sarah worries that the local people are 'free riders' who will never concern themselves with the management of the trail. Josh thinks that society in general is uninterested in funding or supporting trails.

The fears about and miscommunications with all of these stakeholders break up the harmony of the group and contribute to some of their negative perceptions about how the trail is being managed. Sentiments such as 'hikers in our group know better than to do that' and 'regular interaction with nature is needed to appreciate it' encapsulate the central problems with outsider groups as the interviewees see it. People who are involved in the hiking organizations are assumed to follow unspoken rules and expectations out on the trails – interviewees implied that they have more regular interaction with nature and care more about the trail than outsider groups. I have proposed in this research that people need to interact with the trail to care about it, so these are defensible fears. The question then becomes: how do the trail organizations get more people involved in responsible hiking and maintenance activities along their trails?

Goal achieving and contributing to a volunteer-run organization are two potential responses to this question. Both of these themes create a sense of place within the trail experience that is both socially- and physically-grounded. First, if people feel that they are achieving things by hiking (i.e. having a satisfactory recreational experience), they will get out more often and perhaps even become invested in the trail as a place – just as the volunteer trail managers have. And if they feel that they are contributing to a greater community good by assisting with trail maintenance, they will become more responsible hikers and volunteers.

Josie, Tim, and Doreen all feel pride in the trail and its organization, and additionally so because they have contributed to its current state. Charlie has achieved maintenance goals, while Damien and Josie both feel accomplishment from completing several end-to-end hikes. Sarah and

Danielle feel a general sense of well-being from their contributions to the organization, and Josh believes that it has honed and highlighted his pre-existing skills. These core values, as described by each trail organization member, are the reasons they remain emotionally invested in the trail and its maintenance.

Being able to help out a volunteer organization is also an intangible, but powerful, reason given for volunteering with the trail. Charlie and Damien enjoy their long-term association with the group and their heightened awareness of its needs. Joseph assigns value to his ability to help individual members of the organization, and Sarah and Josh regard their involvement as giving back to a larger community. It is the symbolic value of working together with a community of people to build a trail for social, environmental, and physical benefits that is of instrumental value to the organization's functioning here. Trail organizations must therefore remain open to the unifying power of the trail as a symbolic entity for volunteers and hikers alike, ensuring that the trail remains open and accessible as well as the focus of their endeavors and energies.

5.1.4 Do conflicts result from differences between people in how the trail is perceived, valued, and used? If conflicts do exist, how do these issues impact trail management?

Problematic communication with outsider groups, limited volunteer recruitment, and forming new partnerships are all challenges that contribute to a common concern amongst members that the trail and its organization may not last forever. Signage, rules, and bureaucracy are the three aspects of trail management which must change to solve these challenges. Each challenge will be discussed in combination with the two themes, *alternative methods of management* and *catering to specific volunteer views*.

Communication is challenging because it involves complex issues like liability, but members of the organization are hard-pressed to be in constant communication with the public, landowners, and other assorted stakeholders. Although Martina suggests that the Avon Trail works hard to

attract new members, it is challenging for the organization to balance rural versus urban hiker's expectations. Fears that attracting 'too many' hikers who will subsequently upset landowners is a constant concern for Joseph, Damien, and Carrie. Charlie adds that maintenance workers out on the trails have a hard time working along the trail, on private property, when they lack certain information. This is also an issue for Sebastian when he refers to niche groups (e.g. geocachers).

Problems with communication are here more an issue of personality clashes within the group and between the group and external stakeholders. Communication could be easily achieved through regular social activities, team-building maintenance exercises along the trail, or landowner appreciation dinners; these activities do not take place because some individuals on both sides of the issue feel uncomfortable with the unknown expectations of other parties. This is one of the reasons that the informal handshake agreement is preferred over a legal document between the trail organizations and landowners – it implies fewer expectations and is thus valuable for cutting back on investments of time and stress.

Limited membership within the organizations means that they struggle to manage environmental resources along the trail, coordinate with new members, and provide services such as interpretive hikes. Martina indicated that formal job duties could assist in retaining volunteers, but Charlie and Joseph suggest that people within the organization are not getting along or not participating in certain activities. People training to be Hike Leaders, for example, are thought to be avoiding organizing and leading hikes for the trail organization. Some people attribute this to a societal disregard for the value of trails; cultural influences are certainly important in creating the pre-expectations of potential hikers who may imagine trails to be rigorous, strenuous, and difficult to traverse. This could not be further from the truth as the trail organizations try to ensure safety on the trails through the provision of step stiles and other built structures, while not decreasing the naturalness of the trail by over-maintaining it (e.g. through excessive pruning back of branches).

A lack of membership in the organization also means that existing volunteers have a harder time reaching out to make partnerships with community groups. Trail organizations are thus challenged to secure funding and navigate relationships with different types of users (e.g. foragers). Building these kinds of relationships takes time, energy, and diplomacy from a dedicated volunteer or set of volunteers. The problems discussed here are all interrelated and thus challenging to solve; the interviewees expressed concern that the trail and its organization may not be viable in the long term as a result of these challenges. Differing perceptions of and values towards the trail generates many of these challenges, as does the dominant focus on bureaucratic issues over the arguably more crucial issues of environmental conservation and recreation planning along the trail.

Signage, rules, and bureaucracy are three issues over which people conflict in their perceptions, values, and uses of the trail. As frequently as these issues are mentioned, the trail managers suggest that the source of these pressures originate from outside of their organization, and thus negatively (and uncontrollably) impact trail management.

First, Martina spoke to me about her organization's desire to create interpretive signs and highlighted how the lack of available funds has deterred this initiative. Josie and Joseph suggested that signs are used to communicate safety information to hikers, but that it is up to the individual to act on these guidelines. Various management authorities (i.e. private landowners, conservation authorities, municipalities) along the length of each trail also have a final say in where and how signs are presented to hikers, as described by Damien and Sebastian. In some cases, improper placement or design of the signs can generate value conflicts between stakeholders – for example, trail managers who only want their trail to be used by hikers, and a private landowner who wants motorized vehicles on his or her property. Trail managers who are more cognizant of the type, direction, and strength of people's attachment to the trail environment can better respond to these divergent and conflicting views of the messages imparted by signage (Williams & Stewart, 1998).

Rules are an area in which the Board experiences disharmony in its connection to the trail. First, insurance is highlighted by members such as Martina and Damien as a major concern. Insurance is based on the level of risk posed to hikers, which the trail managers strive to reduce. Carrie and Charlie suggest that the characteristics of hikers – generally older individuals – put them at greater risk and require additional protection from falls and injuries. Risk is also a significant concern for landowners due to concerns about strangers on their land, raising the possibility of lawsuits (as described by Damien) and hunting (as described by Josie).

The potential risk posed to hikers and landowners from a hiking trail is a concern for all long-term trail planning and management initiatives, and the solutions are not likely to be simple or clear cut (Bullock & Lawson, 2008; Marsh & MacPherson, 2008; Needham & Rollins, 2009). However, a trail management Board with greater social and environmental connections to the physical trail could respond faster and with more comprehensive solutions. The current chain of communications within the organizations is bulky and too top-down to enact change at the trail level. As Charlie demonstrates with his initiative in designing a new type of stile for older members, sometimes it takes the on-the-ground individual working closely with the trails to make well-informed and prompt changes to the status quo.

Bureaucracy was also described by the trail managers as a source of value conflict and likely a contributor to the issue of empty roles at the Board level. Certain jobs are not taken on by trail members because they are perceived as being too bureaucratic, but the end results of these jobs are also regarded as necessary for the sustainability of the trail (e.g. fundraising, gaining new volunteers, landowner relations, acquiring land). Consequently, volunteer focus shifts *away* from balancing recreation and conservation along the trail and more towards organizational issues. This causes volunteers to lose focus on long-term planning for the trail, and dwindling volunteer resources are wasted on bureaucratic complaints.

An alternative management structure is needed; Trail Directors, or those with equivalent responsibility for a segment of trail, could have greater power and responsibility. Regular meetings with other Trail Directors and communication/direction to Trail Captains would comprise most of the volunteer's time. The Board would exclusively focus on communicating with the public and contributing to the organic financial and volunteer growth of the maintenance teams. As mentioned in the introduction (ch. 1) section of this thesis, the trail organizations undertake management initiatives based on the type and volume of usage along the trails, making them ideally suited to a bottom-up management regime. Reorganizing the groups to ensure every volunteer regularly interacts with the physical trail could maintain the sense of place these individuals feel towards the trail environment; thus ensuring that environmental or recreational problems along the trail are responded to promptly and with consideration for local value systems.

The interviewees do support finding alternative methods of management. Proposed, alternative management strategies included more unplanned hikes (i.e. ones that are not officially lead by Hike Leaders) that allow people to get closer to nature; more access to private land; less direct management of the trail to allow for its natural ecological functioning; and mentoring hikers as empowered, individual stewards of the environment. All of these alternative management visions suggest that the Board and its top-down management authority are problematic – there needs to be more support for the trails from within the community. This first requires that the trail organization open up to its community and trust that new recruits, once they have hiked the trail, will develop a real connection to it and become responsible hikers and volunteers.

Charlie suggests that the trail's management should be cohesive and standardized, but there are already negative perceptions towards this idea and the TVTA has had success in allowing each Trail Director to perform their duties independently. Allowing Hike Leaders to set their own time, place, and speed for hikes is also desirable as it may encourage greater participation. The TVTA sets

a good example by drawing the community out to their short, easy morning walks on a Saturday, thus allowing more people to participate than would have been possible on a weekday hike.

Greater community involvement in, and support for, the trail would provide endless value to the trail organization as a whole. It would entail greater community-based monitoring of the trail environment, provide additional sources of funding, and increase political awareness of the trail as a valuable commodity for tourists and locals alike (Hanna & Slocombe, 2007). Essentially, I envision and propose a trail organization that shares responsibility equally among its members. Volunteers with the organization would also be empowered to act as individual stewards of the trail environment, growing close to the trail through their participation and drawing community support through their passion for the trail as an environmental and community resource.

Chapter 6

Conclusions: A Sense of Place within Trail Management

In this thesis, I have investigated the common perspectives of the trail experience for volunteers, as derived from my interactions with these individuals in interviews and participation observation hikes. After observing the significant challenges facing the management of these organizations, and the distance between their bureaucracy and their trail, I endeavored to highlight possible solutions through the guidance provided by sense of place literatures.

With my focus on the Grand Valley Trail Association, Thames Valley Trail Association, and Avon Trail Association, I hope to highlight some recommendations here that will be useful to trail organizations and tourism managers. Key recommendations are italicized within the chapter and summarized in point form for clarity. Future research suggestions for researchers are also given.

Volunteers devoting their time to the livelihood of a trail and its organization are understandably driven by certain passions and interests which they regard as important. I found that local was a strong value statement for interviewees, and the local concept acted as an emotional frame for their interpretation of the trail environment. The trail also represented a social-recreational space where family and community could benefit equally. Consequently, trail organizations should continue to *promote themselves to the public and the government as local, community-oriented groups*. This requires that the organizations open their doors and their hearts to perceived 'outsiders' to the organization, allowing them to bring new energy to the organization rather than assuming that they will dilute established values of the group. It might also entail promoting the trail and its organization as a low-cost tourism asset. Emphasizing this tangible, economic value of the trail (especially if the organization undertakes a program to monitor/count trail usage) could give the trail organizations leverage while lobbying government to give

landowners tax breaks and other financial incentives for opening their land to public hikers. At the moment, Hike Ontario is working on advancing this idea but lacks the tangible economic clout to back up their value as an organization.

As well as the social focus of the trail and hiking experience, mental benefits also accrued to hikers who felt that the trail landscape provided them with freedom from the status quo. Elements of place dependence and place identity became important here as interviewees regarded the trail as supporting specific recreational activities while also representing positive and life-affirming qualities. Consequently, trail organizations should seek to bring *new volunteers out onto the trails for a satisfying hiking experience that can (depending on the variables at play) contribute to a growing attachment between the new volunteer and the trail environment.*

With volunteers that are more connected to the trail environment, trail management plans could be developed to deal with the long-term planning and management challenges facing the organizations. Progressive policies are needed to leverage the intangible but cumulative value of trails to the larger financial and social fabric of communities. Government policy could be supporting the design and management of volunteer trails for their ability to bring in tourism revenue and promote community cohesiveness. Trail organizations have little influence over this development, except by *becoming more transparent about their management activities with the general public and providing more interpretive, public hikes of their trail.*

The achievement of goals and feelings of 'giving back' to the community are two central methods for encouraging volunteers to care about the trail and support it via maintenance work. People who care about a trail can contribute positively to its long-term survival through the investment of volunteer hours and maintenance work, as exemplified by the comments of current volunteer trail managers. Hiking end-to-end along a trail is one form of goal setting that allows people to feel invested in the trail as a place. Volunteer trail managers also enjoy contributing to

maintenance work because it allows them to feel like they own a piece of land and are able to make it into a resource for others to enjoy. Thus, trail organizations should be *cultivating feelings of goal achievement and community recognition for their volunteers* – whether this community is just from within the trail organization, or widespread feedback from society at large.

Communication with outsider groups is stressful and complicated for the trail organizations. They have to talk to each other, and share information about the trail quickly so that appropriate maintenance or landowner relationship building can occur. Regular social activities, team-building maintenance exercises along the trail, or landowner appreciation dinners are difficult to organize and execute because of personality clashes, as well as the obvious issues with scheduling and time commitment. *Trails managers should take action on this by devolving power from the Board to individual Trail Directors.* Allowing Trail Directors greater authority to (for example) communicate with landowners would mean that hands-on maintenance activities could happen by those who are most connected to and aware of the trail and its needs. This would enhance the bottom-up management orientation of the trail organizations, allowing volunteer trail managers to innovate and advance their current trail-related initiatives. The Board would then serve an auxiliary/supportive role as communicator to the general public and contributor to the financial and volunteer needs of trail maintenance workers.

Limited membership in the group is problematic, but could be solved through *creating proper expectations in the hiker of what their trail experience will be like.* Board resources should be funneled into *creating partnerships with community organizations that can fund initiatives and improve current marketing endeavours.* Only adequate and accurate marketing will provide the local community with awareness of what hiking on this trail is like.

Signage can be improperly placed or designed, resulting in negative public backlash and removal or vandalism to the sign. Trail managers who *are aware of the type, direction, and strength*

of trail stakeholder's values towards a place will be better equipped to design signage. Signage is also meant to manage risk along the trails, preventing people from injuring themselves or harming the landowner's property. However, *rules and bureaucracy need to be reduced in the future evolution of the trail organizations* because they separate the trail organization Board from the trail itself. Just as hands-on, direct interactions between the hiker and nature are beneficial for getting people involved with the environment along the trail, focusing on the beauty of nature and the ecological value of the trail could allow the Board to find new strength and ideas as their organization evolves into the future.

Consequently, alternative management strategies that came up in the interviews included more spontaneous hikes that *allow people to get closer to nature; more access to private land; less direct management of the trail to allow its ecological functioning; and fostering hikers as empowered, individual stewards of the environment*. These are all ideas that first require the organization to open its trust to the community and new volunteers who will become responsible hikers and volunteers only through developing a close, personal connection to the trail. This is also the primary contribution of this thesis to sense of place research – describing the value of sense of place to volunteers and to trail management.

Further research would be helpful for better understanding the various stakeholders involved in this system. Place-based researchers may have an interest in carrying on with this line of inquiry by evaluating how 'niche' trail users (e.g. foragers) value the trail environment; or by investigating the connections and perceptions of different types of landowners towards their trail (e.g. urban versus rural landowners). Researchers interested in trail planning might investigate methods for engaging the public with sense of place concepts to enable and enhance resource management strategies.

Volunteers might be the focal point of two future research streams: 1) investigating how volunteer roles are balanced between presumed ‘free loaders’ and those more deeply engaged in the voluntary activity; and, 2) evaluating volunteer tourism as a potential strategy for trail building, maintenance, and repair. Recreation-based researchers could explore contrasting perspectives between urban and rural hikers. Tourist researchers might investigate perceptual barriers (both academic and societal) preventing nature trails from becoming concrete economic resources for tourism. Future suggestions for research are highlighted in point form on the following pages.

To reiterate, I envision and propose a trail in which greater care is invested in showing the hiker how to love and enjoy the trail’s social and environmental landscape, and every member of the organization acts as a proponent and beacon for others to come and help support the main and most important thing – the trail.

Summary of recommendations for trail managers:

1. Promote the trail and its organization as local, community-oriented groups.
2. New volunteers should be taken out on the trails for a hike with a Board member as the first order of business.
3. Trail organizations should become more transparent about their management activities with the general public and provide more interpretive hikes of their trail so that locals can appreciate and value what the trail offers.
4. Cultivate and recognize goal achievement and community service hours for volunteers.
5. Empower those directly involved in maintenance of the trail to perform certain bureaucratic activities, such as communicating with landowners.
6. Create proper expectations in the potential hiker of what their trail experience will be like.

7. Focus existing resources into making partnerships with community organizations that can fund initiatives and improve current marketing endeavours.
8. Know the type, direction, and strength of trail stakeholder's values towards a place when designing signage.
9. Lessen the focus on rules and bureaucracy in favour of finding strength in the ecological and social value of the trail. If you do not see these values clearly as a trail manager, neither will anyone else.
10. Consider alternative foci in management initiatives: allow hikers to have more spontaneous, unplanned hikes on your trails; use tourists to leverage the value of your trail and get incentives for private landowners; retain naturalness of the landscape by performing less intensive management activities; and allow hikers to be empowered, individual stewards of the environment.

Recommendations for tourism managers:

1. Recognize and promote the value of your local volunteer-run trails.
2. Support local trails through in-kind and financial donations in exchange for metrics, research, and monitoring into characteristics of trail users.
3. Leverage the beauty of the trail as a low-cost tourism draw that also benefits community unity and quality of life.

Possible avenues of future research:

1. Perceptions of 'niche' (e.g. geocachers) users towards the trail environment.
2. Sense of place felt by different types of landowners (e.g. urban versus rural) and associated attitudes towards their land.
3. Methods for stimulating sense of place in the public to enhance resource management

4. Balance of volunteer roles between 'free loaders' and those more deeply engaged in the voluntary activity.
5. Volunteer tourism as a potential strategy for trail building, maintenance, and repair.
6. Contrasting perspectives between urban and rural hikers.
7. Perceptual barriers towards including nature trails as concrete tourist resources.

Appendix A

Participation Observation Questions

Self-reflexive questions that I asked myself during the hike, along with noting the time, location, and trail involved.

- 1) What are the general characteristics (i.e. approximate age, gender) of hike users?
- 2) What structures (e.g. fences, signage) are in place to guide my hike? Were these structures erected by the trail organization in charge of the trail?
- 3) What comments are made by hikers about the trail? What do they seem to notice most?
- 4) If applicable, are the hiker's comments on the trail positive or negative? Why or why not does this appear to be the case?
- 5) How am I, as both a researcher and regular hiker, interacting with the trail environment? What implications does this interaction have for my research findings?

Appendix B

Self-Reflexive Commentary – Participation Observation Hikes

Overview of self-reflexive comments made after the first participation observation hike:

- Structures to guide my hike were minimal; we were mostly on urban areas, the hike leader was in charge, and the focus was on exercise (=we went up hills, down hills, under bridges and so on)
- No private landowners in the area, we were mostly on public streets and public parks
- Safety was a bit of a concern as we crossed really busy streets, but they had a 'sweeper' who acted as the person making sure no one fell behind
- On big hikes of 40-50 people, which they do sometimes have, they will have people posted throughout the hike to ensure that everybody (even stragglers) make all the right turns and don't get lost on the trails
- They have a sign-in process at the beginning, where the hike leader gets you to sign your name and phone number; I got the sense [name removed] was hoping to have a large number of people for the purposes of competing with other hike leaders
- We were shuffling out of the way for bikers and other walkers (sharing with other users)

Comments made by hikers included:

- Hole in the trail (unsafe)
- Moved off the Thames Valley Parkway (famous) to the TVTA side trails, of which there are many
- They noticed weeds, wildflowers, and other plants
- We circled city roads often
- There was general joking and chatting, which the hikers anecdotally reported made the time pass faster
- They noticed the community garden along the trails, nice houses, and smoke stacks along the trail
- They commented on the low river levels (lack of rain this year)
- The hike leader pointed out to everyone (though no one took any pictures!) that there was an osprey in flight as well as an osprey nest

Hiker's comments were neither negative nor positive in most cases:

- They wondered if there were giant hogweed plants on the trail
- There were many beautiful vistas
- They needed their water bottles and sticks
- There was much chatting within the groups, and many talked about family; they seemed to know each other well, possibly they resented me as an intruder
- Some people were independent walkers; one lady was a First Aid Course instructor
- Many people were hot and used rags to wipe the sweat off their faces; possibly it was the first time they'd been outside all day

My interactions with the trail environment were affected by many things (e.g. trying to maintain conversation with hikers), but here's what I wrote:

- Lovely evening, happy just to be outside appreciating the environment in a group context
- Unhappy being near a loud, noisy road
- New people joined the hike later, though I'm not sure (maybe I just didn't notice them at first?)
- Hard to explain to everyone why my research is important, hoping that other hikes will understand more
- There were sports going on in the area, we passed cute dogs and barking dogs and other hikers/cyclists
- People IN LONDON don't know that there are trails bisecting every part of the city- do they feel unsafe/bored when not in a group context?

Appendix C

Organizational Chart for Participation Observation Notes

Example chart used to organize my thoughts and remove the influence of reflexive commentary in my participation observation notes.

Comments Made by Hikers	Negative/Positive Comments of Hikers	My Comments RE: Hike
Unsafe hole in the trail? (hiker safety)	Giant hogweed on the trail? (hiker safety) General chatting between the hikers (camaraderie)	Some people were independent/focused hikers/walkers (personal preference) The hikers were hot and brought water with them (hiker safety)

Appendix D

Interview Questions

Questions asked of each interview participant included:

- 1) What motivated you to originally get involved in your trail organization? How long have you been involved in the organization?
- 2) How does your involvement in the trail organization make you feel?
- 3) What do you think about your trail organization's management procedures?
- 4) What strategies does your organization use to manage hiker activities on the trails?
- 5) What are the challenges your organization faces now and into the future?
- 6) Do you believe that your organization needs to change the way that it manages the trails? If yes, why? If no, why not?
- 7) How does your organization manage relationships with stakeholders (e.g. private landowners, users, government agencies, other trail organizations, etc.)?
- 8) What is your organization doing to manage any current partnerships with external organizations (e.g. other hiking clubs, non-profit organizations)?
- 9) What management issues have we not yet discussed that you think might be important to this study?

Appendix E

Excerpt of Extracted Significant Statements

Excerpt of significant statements taken from a single interview:

But the section of trail that we are trail captains of now at the time had grass that was knee high at the time. It covered the ground, and you couldn't see your feet, you couldn't see the path with unknown footing

When we joined the trail that year, I thought it'd be a good birthday present. He [their son] needed something to do, so we found somewhere we could look after. This was about the only section they didn't have anybody for. So we took it up, and we've made it into something now that you can walk along without fainting.

When we first came to Canada in '68, we had to ask, 'where do you walk?' Everything seemed like private land.

But when you've got children, you can't really help out with projects like that.

As we got more familiar, we found these places. Then we became aware of the trail.

Well, the signage, the blazing, we have a separate blazer. That's been ongoing for several years- he's been doing it for many years. Basically, whenever the trail captain sends in their bi-annual report, they often say that the blazes are fading. I just pass the messages along to him

[RE: Trail user's code] That was developed long before I got involved. It hasn't really been changed.

We've just finished replacing all the big boards at the end of each section that is off the road. And rewording them. So that signage is better now, than it was

But I think we could still do a bit more advertising. I think we need to put up little signs that say 'come visit our website, tvta.ca'.

There are organized hikes, if you want to go as a group. Most people, as we say, don't know about the full scope of the trail, just a few sections here and there.

Like most of these clubs, our membership is pretty old. But it is stable at 330 or something.

[RE: Environmental damage] Anywhere near the cities. Near St. Thomas, when you're on the Elgin, or when it goes through London, you see far more litter. And people doing stupid things. Because it's more accessible to general people.

In the country the ATVs come along- they're a mixed blessing, because they do cause erosion, but at the same time they also help with our maintenance quite a bit.

In Komoka Park, the horses have really done a lot of damage. Paths that were flat are now in deep gullies and are eroding.

Probably the bikes are doing the same thing. The ministry is trying to improve Komoka and regulate that kind of thing.

But, other erosion will be natural erosion and we just try to deal with that as it happens. Repairing the trail.

There was someone who was leading fungi forays into various – and of course, he would want to go everywhere. If it is low-impact use, just an occasional thing, I don't see a problem with that. But if it develops, you'll get lots of trails everywhere.

[RE: Landowners] It's a struggle to get them to agree, and then occasionally we've had them pull back their agreement. Like the case back in February, where people were going along the trail with their guns. And shooting along the trail.

Appendix F

Excerpt of Meanings of Significant Statements

Excerpts of meaning from significant statements taken from a single interview:

Long-term involvement in the trail group

Attachment to certain types of trail work (e.g. structures)

Pride in work

Need for feedback/support from trail group

Need for physical activity

Feelings of freedom while hiking

Regular habit of hiking

Goal-setting activity (e.g. end-to-end hikes)

Standards and rules as unquestioned in trail maintenance (e.g. structures)

Avoidance of bureaucracy (e.g. insurance)

Landowners as adversaries/avid supporters of trail group

Empty roles in trail organization

Need to maintain trail/nature to a high standard

Possessiveness towards trail features (esp. Structures)

Frustration over lack of communication between general public and trail group

Signs as sights of meaning for trail users (e.g. use at your own risk, prohibited activities)

Avoidance of conflicts between trail users and landowners (e.g. geocache, foragers)

Communication errors with landowner

Declines in trail group membership

Devotion to hiking as central source of physical, outdoor activity

Fear of excessive bureaucracy in the trail group (esp. At the cost of maintenance and the health of the trail)

Trail maintenance as a father-daughter activity

Excessive time commitment for the Board

Empty roles within the Board (e.g. Marketing, Volunteer Coordinator)

References

- Alexander, C. (2002). *The Nature of Order: An Essay on the Art of Building and the Nature of the Universe*. Book 1: The phenomenon of life. Berkeley, CA: The Center for Environmental Structure.
- Arnberger, A., & Eder, R. (2011). The influence of age on recreational trail preferences of urban green-space visitors: A discrete choice experiment with digitally calibrated images. *Journal of Environmental Planning and Management*, 54 (7), 891-908.
- Arnberger, A., Haider, W., Eder, R., & Muhar, A. (2010). Modeling visitor groups' intentions to displace from an urban trail: A combined stated preference and video monitoring approach. *Journal of Environmental Planning and Management*, 53 (6), 809-825.
- Audi, R. (2003). *Epistemology: A Contemporary Introduction to the Theory of Knowledge* (2nd Edition). London: Routledge.
- Avon Trail. (2012). *Avon Trail Guide: St. Marys to Conestogo Ontario, Canada* (6th Ed.). Stratford, Ontario.
- Azjen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Beckley, T.M., Stedman, R.C., Wallace, S.M., & Ambard, M. (2007). Snapshots of what matters most: Using resident-employed photograph to articulate attachment to place. *Society and Natural Resources*, 20, 913-929.
- Beckley, T.S. (2003). The relative importance of socio-cultural and ecological factors in attachment to place. General Technical Report PNW-GTR-566. In L.E. Kruger (Ed.) *Understanding Community-Forest Relations* (pg. 105-126). Portland, Oregon: U.S. Department of Agriculture, Forest Service. Pacific Northwest Research Station.

- Bow, V., & Buys, L. (2003). *Sense of Community and Place Attachment: The Natural Environment plays a Vital Role in Developing a Sense of Community*. In Paper presented to the Social Change in the 21st Century Conference.
- Brandenburg, A.M., & Carroll, M.S. (1995). Your place or mine: The effect of place creation on environmental values and landscape meanings. *Society of Natural Resources*, 8, 381-398.
- Brehm, J.M. (2007). Community attachment: The complexity and consequence of the natural environment facet. *Human Ecology*, 35, 477-488.
- Brehm, J.M., Eisenhauer, B.W., & Krannick, R.S. (2006). Community attachments as predictors of local environmental concern: The case for multiple dimensions of attachment. *American Behavioral Scientist*, 50, 142-165.
- Bright, J.A. (1986). Hiker impact on herbaceous vegetation along trails in an evergreen woodland of Central Texas. *Biological Conservation*, 36 (1), 53-69.
- Brown, G. (2005). Mapping spatial attributes in survey research for natural resource management: Methods and applications. *Society and Natural Resources*, 18, 17-39.
- Brown, G., & Raymond, C. (2007). The relationship between place attachment and landscape values: Toward mapping place attachment. *Applied Geography*, 27, 89-111.
- Brown, G., & Weber, D. (2011). Public participation GIS: A new method for national park planning. *Landscape and Urban Planning*, 102 (1), 1-15.
- Bruyere, B., & Rappe, S. (2007). Identifying the motivations of environmental volunteers. *Journal of Environmental Planning and Management*, 50 (4), 503-516.
- Bullock, S.D., & Lawson, S.R. (2008). Managing the 'commons' on Cadillac Mountain: A stated choice analysis of Acadia National Park visitors' preferences. *Leisure Sciences*, 30, 71-86.
- Buscher, B., Sullivan, S., Neves, K., Igoe, J., & Brockington, D. (2012). Towards a synthesized critique of neoliberal biodiversity conservation. *Capitalism Nature Socialism*, 23 (2), 4-30.

- Buttimer, A. (1980). Home, reach, and the sense of place. In A. Buttimer & D. Seamon (Eds.), *The Human Experience of Space and Place* (pp. 73-85). New York: St. Martin's Press.
- Casey, E.S. (1997). *The Fate of Place: A Philosophical History*. Berkeley: University of California Press.
- Champ, J.G., Williams, D.R., & Knotek, K. (2009). Wildland fire and organic discourse: Negotiating place and leisure identity in a changing wildland urban interface. *Leisure Sciences, 31*, 237-254.
- Charmaz, K. (2004). Premises, principles, and practices in qualitative research: Revisiting the foundations. *Qualitative Health Research, 14* (7), 976-993.
- Chauvin, P.J. (1997). *Planning Hiking Trails on Private Lands: The Case of the Grand Valley Trails Association*. University of Waterloo Thesis, Waterloo, ON.
- Cheng, A.S., Kruger, L.E., & Daniels, S.E. (2003). "Place" as an integrating concept in natural resource politics: Propositions for a social science research agenda. *Society & Natural Resources, 16* (2), 87-104.
- Chhetri, P., Arrowsmith, C., & Jackson, M. (2004). Determining hiking experiences in nature-based tourist destinations. *Tourism Management, 25*, 31-43.
- Chiesura, A. (2004). The role of urban parks for the sustainable city. *Landscape and Urban Planning, 68* (1), 129-138.
- Chon, J., & Shafer, C.S. (2009). Aesthetic responses to urban greenway trail environments. *Landscape Research, 34* (1), 83-104.
- City of London. (2012). *Planning and Design Standards for Trails in Environmentally Significant Areas*. Prepared by Parks Planning and Design, Planning Division with Schollen & Company Inc. and North-South Environmental. Retrieved July 19th, 2012 from

http://www.london.ca/Planning_and_Development/Land_Use_Planning/Parks_Planning/PDFs/MedwayPathway_Standards_version5.pdf

- Clary, E.G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current Directions in Psychological Science*, 8 (5), 156-159.
- Colaizzi, P.F. (1978). Psychological research as the phenomenologist views it. In R.S. Valle and M. King (Eds.), *Existential Phenomenological Alternatives for Psychology*. New York, NY; Oxford Press.
- Cronon, W. (1995). Introduction: In search of nature. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature* (pp. 23-56). New York: W.W. Norton.
- Cuba, L. & Hummon, D.M. (1993). A place to call home: Identification with dwelling, community, and region. *Sociology Quarterly*, 34 (1), 111-131.
- Daly, K.J. (2007). Methodology: Links among ontological assumption, theory, and forms of inquiry. In *Qualitative Methods for Family Studies and Human Development* (pp. 83-128). Thousand Oaks, CA: Sage.
- Davenport, M.A., & Anderson, D.H. (2005). Getting from sense of place to place-based management: An interpretive investigation of place meanings and perception of landscape change. *Society and Natural Resources*, 18, 625-641.
- de Wit, C.W. (2013). Interviewing for sense of place. *Journal of Cultural Geography*, 30 (1), 120-144.
- Deluca, T.H, Patterson, W.A., Freimund, W.A., & Cole, D.N. (1998). Influence of llamas, horses, and hikers on soil erosion from established recreation trails in Western Montana, USA. *Environmental Management*, 22 (2), 255-262.
- Denzin, N.K., & Lincoln, Y.S. (Eds.) (2000). *Handbook of Qualitative Research* (2nd ed.). Thousand Oaks, CA: Sage.

- Deutsch, K., Yoon, S.Y., & Goulias, K. (2013). Modeling travel behavior and sense of place using a structural equation model. *Journal of Transport Geography*, 28, 155-163.
- DMTI Spatial Inc. (2012). Scholars GeoPortal Data Service. *Canada Urbanized Areas Polygons [Vector Shapefile]; CanMap Populated Placenames Points [Vector Shapefile]; Major Water Regions Polygons [Vector Shapefile]*. Updated July, 2013.
- Dowart, C.E., Moore, R.L., & Leung, Y.F. 2010. Visitors' perceptions of a trail environment and effects on experiences: A model for nature-based recreation experiences. *Leisure Sciences*, 32 (2), 33-54.
- Droseltis, O., & Vignoles, V.L. (2010). Towards an integrative model of place identification: Dimensionality and predictors of interpersonal-level place preferences. *Journal of Environmental Psychology*, 30, 23-34.
- Dupuis, S.L. (1999). Naked truths: Towards a reflexive methodology in leisure research. *Leisure Sciences*, 21, 43-64.
- Dwyer, M. (2011). 'Go softly through nature place': Assessing four paradigms of naturalized park design. University of Waterloo Thesis, Faculty of Planning.
- Emerson, R.M., Fretz, R.I., & Shaw, L.L. (2007). Participant observation and fieldnotes. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.). *Handbook of Ethnography* (pp. 352-367). Thousand Oaks, CA: Sage.
- ESRI (2010). ArcGIS Basemaps. *Ontario Rivers Lines [Vector Shapefile]*. Updated July, 2013.
- Farnum, J., Hall, T., & Kruger, L.E. (2005). *Sense of Place in Natural Resource Recreation and Tourism: An Evaluation and Assessment of Research Findings*. Portland, PR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
- Fennell, D.A. (1999). *Ecotourism: An Introduction*. New York; Routledge.

- Fishwick, L., & Vining, J. (1992). Toward a phenomenology of recreation place. *Journal of Environmental Psychology, 12*, 57-63.
- Florida, R. (2002). *The Rise of the Creative Class*. New York: Basic Books.
- Frumkin, H. (2001). Beyond toxicity: Human health and the natural environment. *American Journal of Preventative Medicine, 20* (3), 234-240.
- Gadamer, H. -G. (1989). *Truth and Method* (J. Weinsheimer & D.G. Marshall, Trans.) (2nd Ed.). New York: Crossroads.
- Gobster, P.H. (1995). Perception and use of a metropolitan greenway system for recreation. *Landscape and Urban Planning, 33*, 401-413.
- Grand Valley Trails Association. (2009). *Grand Valley Trails Association Guidebook: A Footpath along the Grand River Valley* (6th Ed.). Kitchener, Ontario: Minuteman Press.
- Greider, T., & Garkovich, L. (1994). Landscapes: The social construction of nature and the environment. *Rural Sociology, 59*, 1-24.
- Gruenwald, D. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher, 32*(4), 3-12.
- Guba, E.G. & Lincoln, Y.S. (1989). *Fourth Generation Evaluation*. London: Sage Publications Ltd.
- Hacking, E.B., Barratt, R., & Scott, W. (2007). Engaging children: Research issues around participation and environmental learning. *Environmental Education Research, 13* (4), 529-544.
- Hall, C.N., & Kuss, F.R. (1989). Vegetation alteration along trails in Shenandoah National Park, Virginia. *Biological Conservation, 48* (3), 211-227.
- Hammit, W.E., Backlund, E.A., & Bixler, R.D. (2006). Place bonding for recreation places: Conceptual and empirical development. *Leisure Studies, 25*, 17-41.

- Hanna, K.S., & Slocombe, D.S. (Eds.) (2007). *Integrated Resource and Environmental Management: Concepts and Practice*. UK; Oxford.
- Heidegger, M. (1962) *Being and Time*. New York: Harper and Row.
- Hernandez, B., Hidalgo, M.C., Salazar-Laplace, M.E., & Hess, E. (2007). Place attachment and place identity in natives and non-natives. *Journal of Environmental Psychology*, 27, 310-319.
- Hike Ontario. (2007). *Best Practices: For Increasing Trail Usage by Hikers and Walkers*. Retrieved January 5th, 2012 from <http://www.hikeontario.com/downloads/HO-BestPractices-Web.pdf>
- Hike Ontario. (2010). *Annual Report 2010-2011*. Obtained January 4th, 2012 from <http://www.hikeontario.com/aboutus/downloads/HO-Annual-Report-2010-2011.pdf>
- Hill, W., & Pickering, C.M. (2006). Vegetation associated with different walking track types in the Kosciuszko alpine area, Australia. *Journal of Environmental Management*, 78(10), 24-34.
- Hull, R.B., & Stewart, W.P. (1995). The landscape encountered and experienced while hiking. *Environment and Behavior*, 27, 404-426.
- Hunt, R. (2010). *Compass 2015: Strategic Planning Report*. Prepared for Hike Ontario by the Strategic Planning Committee. Retrieved February 2, 2012 from http://www.hikeontario.com/aboutus/downloads/Compass2015_Strategic%20Planning%20Report_Final.pdf
- Ittelson, W.H., Franck, K.A., & O'Hanlon, T.J. (1976). The nature of environmental experience. In S. Wapner, S.B. Cohen, & B. Kaplan (Eds.), *Experiencing the Environment* (pp. 187-206). New York: Plenum.
- Jamal, T., & Hollinshead, K. (2001). Tourism and the forbidden zone: The underserved power of qualitative inquiry. *Tourism Management*, 22 (1), 63-82.

- Johnson, D.R., & Swearingen, T.C. (1992). *The Effectiveness of Selected Trailside Sign Texts in Deterring Off-Trail Hiking at Paradise Meadow, Mount Rainier National Park*. Retrieved February 3rd, 2012 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.123.236&rep=rep1&type=pdf#page=113>
- Johnson, M. (2007). *The Meaning of the Body: Aesthetics of Human Understanding*. Chicago: The University of Chicago Press.
- Jorgensen, B.S., & Stedman, R.C. (2001). Sense of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of Environmental Psychology, 21*, 233-248.
- Jorgensen, B.S., & Stedman, R.C. (2006). A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties. *Journal of Environmental Management, 79*, 316-327.
- Kaltenborn, B.P., & Williams, D.R. (2002). *The Meaning of Place: Attachments to Femundsmarka National Park, Norway, among Tourists and Locals*. *Norsk Geografisk Tidsskrift, 56*, 189-198.
- Kaplan, S. (1979). Perception and landscapes: Conceptions and misconceptions. In *Proceedings of our National Landscape Conference (USDA) Forest Service*. General Technical Report PSW-35 (pg. 241-248). Berkeley, CA: Pacific Southwest Forest and Range Experiment Station.
- Kates, J. (2013). A path made of words: The journalistic construction of the Appalachian Trail. *American Journalism, 30* (1), 112-134.
- Kelly, G., & Hosking, K. (2008). Nonpermanent residents, place attachment and “sea change” communities. *Environment and Behavior, 40*, 575-594.
- Kim, K., Uysal, M., & Sirgy, M.J. (2013). How does tourism in a community impact the quality of life of community residents? *Tourism Management, 36*, 527-540.

- Kim, O., & Walker, M. (1984). The free rider problem: Experimental evidence. *Public Choice*, 43 (1), 3-24.
- Korpela, K.M. (1989). Place identity as a product of self-regulation. *Journal of Environmental Psychology*, 9, 241-256.
- Kruger, L. E. (2006). Recreation as a path for place making and community building. *Leisure/Loisir*, 30 (2), 283-392.
- Kudryavtsev, A., Stedman, R.C., & Krasny, M.E. (2012). Sense of place in environmental education. *Environmental Education Research*, 18 (2), 229-250.
- Kyle, G., Graefe, A.R., Manning, R., & Bacon, J. (2003). An examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian Trail. *Journal of Leisure Research*, 35 (3), 249-273.
- Kyle, G., Graefe, A., & Manning, R. (2005). Testing the dimensionality of place attachment in recreational settings. *Environment and Behavior*, 37, 153-177.
- Ladkin, D. (2005). 'The enigma of subjectivity': How might phenomenology help action researchers negotiate the relationship between 'self', 'other' and 'truth'? *Action Research*, 3 (1), 108-126.
- Larsen, S.C. (2004). Place identity in a resource-dependent area of Northern British Columbia. *Annals of the Association of American Geographers*, 94 (4), 944-960.
- Laverty, S.M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2 (3), 21-35.
- Lee, T.H. (2011). How recreation involvement, place attachment and conservation commitment affect environmentally responsible behaviour. *Journal of Sustainable Tourism*, 19 (7), 895-915.

- Lefebvre, H. (1991). *The Production of Space*. Oxford, England; Blackwell. (Original work published 1974).
- Leinwand, I.I.F., Theobald, D.M., Mitchell, J., & Knight, R.L. (2010). Landscape dynamics at the public-private interface: A case study in Colorado. *Landscape and Urban Planning*, 97 (3), 182-193.
- Lekies, K.S., & Whitworth, B. (2011). Constructing the nature experience: A semiotic examination of signs on the trail. *American Society*, 42, 249-260.
- Leung, Y.F. (2002). More than a database: Integrating GIS data with the Boston Harbor Islands visitor carrying capacity study. *Applied Geography*, 19 (1), 69-78.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31 (3), 207-230.
- Lyons, E. (1983). Demographic correlates of landscape preference. *Environment and Behavior*, 15 (4), 487-511.
- Manning, R. (1999). *Studies in Outdoor Recreation: Search and Research for Satisfaction* (2nd ed.). Corvallis, Oregon: Oregon State University Press.
- Marion, J.L. (1995). Environmental auditing: Capabilities and management utility of recreation impact monitoring programs. *Environmental Management*, 19 (5), 763-771.
- Markwell, K. (2001). 'An intimate rendezvous with nature'? Mediating the tourist-nature experience at three tourist sites in Borneo. *Tourist Studies*, 1 (1), 39-57.
- Marsh, J., & MacPherson, A. (2008). *Trails, Trail Users and their Management in Northumberland County Forest Ontario* (Draft Report 3). Trail Studies Unit, Trent University, Peterborough, Ontario. Retrieved February 3rd, 2012 from http://www.northumberlandcounty.ca/en/departments_countyadministration_countyforest/resources/Draft%20Trail%20Study%20Jan%202012.pdf

- Matarrita-Cascante, D., Stedman, R., & Luloff, A.E. (2010). Permanent and seasonal residents' community attachment in natural amenity-rich areas: Exploring the contribution of landscape-related factors. *Environment and Behaviour, 42* (2), 197-220.
- Mayberry, B.L. (2013). The land of allium: An exploration into the magic of place. *Journal of Cultural Geography, 30* (2), 245-265.
- McDougall, K.L., Khuroo, A.A., Loope, L.L., Parks, C.G., Pauchard, A., Reshi, Z.A., Rushworth, I., & Kueffer, C. (2011). Plant invasions in mountains: Global lessons for better management. *Mountain Research and Development, 31* (4), 380-387.
- McEwen, D., & Ross, T.S. (1976). Zone management: Key to controlling recreational impact in developed campsites. *Journal of Forestry, 74* (2), 90-93.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. London: Routledge.
- Mezei, B.M. (1995). World and the life-world: Aspects of the philosophy of Edmund Husserl. *European University Studies, 457*, 20. New York: Peter Lang.
- Ministry of Health Promotion. (2005). *Active 2010: Ontario Trails Strategy*. Retrieved February 2, 2012 from http://www.mhp.gov.on.ca/en/active-living/recreation/A2010_TrailStrategy.pdf
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology, 30*, 11-22.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Thousands Oaks, CA: Sage.
- Mullins, P.M. (2009). Living stories of the landscape: Perceptions of place through canoeing in Canada's North. *Tourism Geographies, 11* (2), 233-255.
- Naoi, T., Yamada, T., Iijima, S., & Kumazawa, T. (2011). Applying the caption evaluation method to studies of visitors' evaluation of historical districts. *Tourism Management, 32*, 1061-1074.

- Nasar, J.L. (1997). New developments in aesthetics for urban design. In G.T. Moore & R.W. Marans (Eds.), *Advances in Environment, Behavior, and Design*. New York, Plenum Press.
- Natural Earth (2012). Free Vector and Raster Map Data. *Admin 1 – States, Provinces Polygons [Vector Shapefile]; Lakes + Reservoirs, North America Supplement Polygons [Vector Shapefile]*. Updated July, 2013.
- Needham, M.D., & Rollins, R. (2009). Social science, conservation, and protected areas theory. In P. Dearden & R. Rollins (Eds.), *Parks and Protected Areas in Canada: Planning and Management* (3rd Ed), (pp. 135-168). ON: Oxford University Press
- Nemec, K.T., Allen, C.R., Alai, A., Clements, G., Kessler, A.C., Kinsell, T., Major, A., & Stephen, B.J. (2011). Woody invasions of urban trails and the changing face of urban forests in the Great Plains, USA. *The American Midland Naturalist*, 165 (2), 241-256.
- Nepal, S.K., & Way, P. (2007). Characterizing and comparing backcountry trail conditions in Mount Robson Provincial Park, Canada. *Ambio*, 36 (5), 394-400.
- Norberg-Schultz, C. (1979). *Genius Loci: Towards a Phenomenology of Architecture*. New York: Rizzoli.
- Norton, A. (1996). Experiencing nature: The reproduction of environmental discourse through safari tourism in East Africa. *Geoforum*, 27 (3), 355-373.
- Olive, N.D., & Marion, J.L. (2009). The influence of use-related, environmental, and managerial factors on soil loss from recreational trails. *Journal of Environmental Management*, 90 (3), 1483-1493.
- Orr, D. (1992). *Ecological Literacy*. Albany: State University of New York Press.
- Patterson, M.E., & Williams, D.R. (2005). Maintaining research traditions on place: Diversity of thought and scientific progress. *Journal of Environmental Psychology*, 25, 361-380.

- Payne, L.L., Mowen, A.J., and Orsega-Smith, E. (2002). An examination of park preferences and behaviors among urban residents: The role of residential location, race, and age. *Leisure Sciences, 24*, 181-198.
- Pernecky, T., & Jamal, T. (2010). (Hermeneutic) phenomenology in tourism studies. *Annals of Tourism Research, 37* (4), 1055-1075.
- Pinn, J. (2001). Crises of representation. In H. Byrne-Armstrong, J. Higgs and D. Horsfall (Eds.). *Critical Moments in Qualitative Research*. Woburn, MA; Butterworth-Heinemann.
- Polkinghorne, D.E. (1989). Phenomenological research methods. In R.S. Valle & S. Halling (Eds.). *Existential-Phenomenological Perspectives in Psychology* (pg. 41-60). New York: Plenum Press.
- Ponzetti, J.J. Jr. (2003). Growing old in rural communities: A visual methodology for studying place attachment. *Journal of Rural Community Psychology, Vol. E6* (No. 1).
- Raymond, C.M., Brown, G., & Robinson, G.M. (2011). The influence of place attachment, and moral and normative concerns on the conservation of native vegetation: A test of two behavioural models. *Journal of Environmental Psychology, 31* (4), 323-335.
- Relph, E. (1976). *Place and Placelessness*. London: Pion Limited.
- Roger, L., & Graefe, A.R. (1994). Attachments to recreation settings: The case of rail-trail users. *Leisure Sciences: An Interdisciplinary Journal, 16* (1), 17-31.
- Roulston, K., deMarrais, K., and Lewis, J.B. (2009). Learning to interview in the social sciences. *Qualitative Inquiry, 9* (4), 643-668.
- Ryan, R.L., Kaplan, R. & Grese, R.E. (2001). Predicting volunteer commitment in environmental stewardship programmes. *Journal of Environmental Planning and Management, 44* (5), 629-648.

- Salingaros, N.A. (1999). Architecture, Patterns, and Mathematics. *Nexus Network Journal*, 3, 75-85.
- Scannell, L., & Gifford, R. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, 30, 1-10.
- Schama, S. (1996). *Landscape and Memory*. London: Fontana Press.
- Schasberger, M.G., Husa, C.S., Polgar, M.F., McMonagle, J.A., Burke, S.J., & Gegaris. (2009). Promoting and developing a trail network across suburban, rural, and urban communities. *American Journal of Preventative Medicine*, 37 (6), S336-S344.
- Schroeder, H. (1982). Preferred features of urban parks and forests. *Journal of Arboriculture*, 8 (12), 317-322.
- Schroeder, H.W. (2007). Place experience, gestalt, and the human-nature relationship. *Journal of Environmental Psychology*, 27 (4), 292-309.
- Schultz, P.W. (2000). Empathizing with nature: The effects of perspective taking on concern for environmental issues. *Journal of Social Issues*, 56 (3), 391-406.
- Schultz, P.W. (2001). The structure of environmental concern: Concern for self, other people, and the biosphere. *Journal of Environmental Psychology*, 21 (4), 327-339.
- Scott, D., Malcolm, J.R., & Lemieux, C. (2002). Climate change and modeled biome representation in Canada's national park system: Implications for system planning and park mandates. *Global Ecology and Biogeography*, 11 (6), 475-484.
- Seamon, D. (1980). Body-subject, time-space routines, and place-ballets. In A. Buttimer, & D. Seamon (Eds.), *The Human Experience of Space and Place* (pg. 148-165). New York: St. Martin's Press.
- Seamon, D. (2000). A way of seeing people and place: Phenomenology in environment-behavior research. In S. Wapner, J. Demick, T. Yamamoto, & H. Minami (Eds.). *Theoretical Perspective*

in *Environment-Behavior Research: Underlying Assumptions, Research Problems, and Methodologies* (pg. 157-178). New York: Kluwer Academic/Plenum Publishers.

Shosha, G.A. (2012). Employment of Colaizzi's strategy of descriptive phenomenology: A reflection of a researcher. *European Scientific Journal*, 8 (27), 31-43.

Smith, D. (1994). Determinants of voluntary association participation and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 26, 243-263.

Spartz, J.T., & Shaw, B.R. (2011). Place meanings surrounding an urban natural area: A qualitative inquiry. *Journal of Environmental Psychology*, 31 (4), 344-352.

Spencer, D. (2010). Segmenting special interest visitors to a destination region based on the volume of their expenditures: An application of rail-trail users. *Journal of Vacation Marketing*, 16 (2), 83-95.

Spiegelberg, H., & Schuhmann, K. (1994). *The Phenomenological Movement: A Historical Introduction* (3rd Edition). Dordrecht: Kluwer Academic Publishers.

Stedman, R.C. (2003). Sense of place and forest science: Toward a program of quantitative research. *Forest Science*, 49, 822-829.

Stedman, R.C. (2006). Understanding place attachment among second home owners. *The American Behavioral Scientist*, 50, 187-205.

Stedman, R., Beckley, T., Wallace, S., & Ambard, M. (2004). A picture and 1000 words: Using resident-employed photography to understand attachment to high amenity places. *Journal of Leisure Research*, 36, 580-606.

Stewart, N. (2010). Dancing the Face of Place: Environmental dance and eco-phenomenology. *Performance Research*, 15 (4), 32-39.

Stewart, W. (2006). Community-based place meanings for park planning. *Leisure/Loisir*, 30 (2), 405-416.

- Stokols, D. & Shumaker, S.A. (1981). People in places: A transactional view of settings. In J. Harvey (Ed.), *Cognition, Social Behavior and the Environment* (pg. 441-488). Hillsdale, N.J.; Lawrence Erlbaum Associates.
- Sutter, R.D., Benjamin, S.E., Murdock, N., & Teague, B. (1993). Monitoring the effectiveness of a boardwalk at protecting a low heath bald in the Southern Appalachians. *Natural Areas Journal*, 13 (4), 250-255.
- Taylor, R.B., Gottfredson, S.D., & Brower, S. (1985). Attachment to place: Discriminant validity, and impacts of disorder and diversity. *American Journal of Community Psychology*, 13, 525-542.
- Thames Valley Trail Association. (2008). *A Guide to Hiking the Thames Valley Trail* (3rd Ed.). London, Ontario; Grosvenor Lodge.
- Thomson, I. (2004). Ontology and ethics at the intersection of phenomenology and environmental philosophy. *Inquiry*, 47 (4), 380-412.
- Thurston, E., & Reader, R.J. (2001). Impacts of experimentally applied mountain biking and hiking on vegetation and soil of a deciduous forest. *Environmental Management*, 27, 397-409.
- Tomczyk, A.M. (2011). A GIS assessment and modeling of environmental sensitivity of recreational trails: The case of Gorce National Park, Poland. *Applied Geography*, 31 (1), 339-351.
- Tomczyk, A.M., & Ewertowski, M. (2013). Planning of recreational trails in protected areas: Application of regression tree analysis and geographic information systems. *Applied Geography*, 40 (6), 129-139.
- Tuan Y.-F. (1974). Space and Place: Humanistic Perspective. *Progress in Geography*, 6, 233-246.
- Tuan, Y.-F. (1975). Place: An Experiential Perspective. *Geographical Review*, 65, 151-165.

- Tuan, Y.-F. (1977). *Space and Place: The Perspective of Experience*. Minnesota: The University of Minnesota Press.
- Tuan, Y. -F. (1980). Rootedness versus sense of place. *Landscape*, 24, 3-8.
- Turner, V. (1973). The centre out there: The pilgrim's role. *History of Religions*, 12, 191-230.
- Twigger-Ross, C., Bonaiuto, M., & Breakwell, G. (2003). Identity theories and environmental psychology. In M. Bonnes, T. Lee, & M. Bonaiuto (Eds.). *Psychological Theories for Environmental Issues* (pg. 203-233). Hants: Ashgate.
- Urry, J. (1992). The tourist gaze and the environment. *Theory Culture & Society*, 9 (3), 1-26.
- Van Hemessen, W.D. (2013). *Maria Legault Ontario Trails Map*. Created using data from DMTI Spatial Inc.; ESRI; Natural Earth. Used with permission.
- van Manen, M. (1990). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. Ontario: The Althouse Press.
- Vaske, J.J. & Kobrin, K.C. (2001). Place attachment and environmentally responsible behavior. *Journal of Environmental Education*, 32 (4), 16-21.
- Warzecha, C.A., & Lime, D.W. (2000). Place attachment in Canyonlands National Park: Visitors' assessment of setting attributes on the Colorado and Green Rivers. *Journal of Park Recreation Administration*, 19 (1), 59-78.
- Wasserman, I.M. (1982). Size of place in relation to community attachment and satisfaction with community services. *Social Indicators Research*, 11, 421-436.
- Wiley, C.G.E., Shaw, S.M., & Havitz, M.E. (2000). Men's and women's involvement in sports: An examination of gendered aspects of leisure involvement. *Leisure Sciences*, 22, 19-31.
- Williams, D.R. (2008). Pluralities of place: A user's guide to place concepts, theories, and philosophies in natural resource management. In L. Kruger, T. Hall, and M. Steifel (Eds.),

Understanding Concepts of Place in Recreation Research and Management (pp. 7-30).
Portland, OR: USDA Forest Service, Pacific Northwest Research Station.

Williams, D.R., & Stewart, S.I. (1998). Sense of place: An elusive concept that is finding a home in ecosystem management. *Forest Science*, 95 (5), 18-23.

Williams, D.R., & Van Patten, S. (1998). Back to the future? Tourism, place, and sustainability. In L. Andersson, & T. Blom (Eds.), *Sustainability and Development: On the Future of Small Society in a Dynamic of Economy* (pg. 359-369). Karlstad, Sweden: University of Karlstad.

Williams, D.R., & Vaske, J. (2003). The measurement of place attachment: Validity and generalizability of a psychometric approach. *Forest Science*, 49 (6), 830-840.

Williams, D.R., Patterson, M.E., Roggenbuck, J.W., & Watson, A.E. (1992). Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. *Leisure Sciences*, 14, 29-46.

Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26 (1), 215-240.

Wilson, T. (2012). Hotels as ready-to-hand recreation: TripAdvisor's posting potentiality-for-being in play. *Tourist Studies*, 12 (1), 70-86.

Wimpey, J., & Marion, J.L. (2011). A spatial exploration of informal trail networks within Great Falls Park, VA. *Journal of Environmental Management*, 92 (3), 1012-1022.

Wimpey, J.F., & Marion, J.L. (2010). The influence of use, environmental and managerial factors on the width of recreational trails. *Journal of Environmental Management*, 91 (10), 2028-2037.

Ziaco, E., Alessandrini, A., Blasi, S., Di Filippo, A., Dennis, S., & Piovesan, G. (2012). Communicating old-growth forest through an educational trail. *Biodiversity Conservation*, 21, 131-144.