THE NATURE OF NATURE:
SPACE, PLACE, AND IDENTITY
ON THE APPALACHIAN TRAIL

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The purpose of this study was to examine nature experiences; how these experiences in nature impact place-making and in turn are impacted by place; why someone would choose to engage in an intense nature experience (in connection with significant life experiences); how people connect to nature and what their construction of nature is; and how knowledge is generated during an informal nature experience. A naturalistic inquiry methodology was selected to explore how Appalachian Trail thru-hikers experience and connect to nature, what prior nature experiences and formative influences led them to undertake a long-term outdoor experience, and the relationships between space, place, identity, and power.

To address this purpose, I collected data from 18 Appalachian Trail thru-hikers via in-depth semi-structured interviews, observation field notes, and an autoethnographic research journal. The results of this research included a number of emergent findings. The emergent themes fell into the following categories: awareness of nature, identifying as a participant or observer in nature, power over nature, power of nature, social experiences, nature experiences, learning, significant life experiences, formative influences, reasoning, relationships with nature, bounding/bordering nature, conceptions of nature, place-making, and evolving identities. The results are presented in this
dissertation in support of an argument for environmental education scholars and practitioners to attend to varying constructions of nature as a space, as well as how identity shapes experience and place-making.
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CHAPTER I
INTRODUCTION

Defining the Problem

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.

~Aldo Leopold, A Sand County Almanac

It wasn't the Exxon Valdez captain's driving that caused the Alaskan oil spill. It was yours. ~Greenpeace advertisement, New York Times, 25 February 1990

What would the world be, once bereft
Of wet and wilderness? Let them be left,
O let them be left. Wilderness and wet;
Long live the weeds and the wilderness yet.
~ Gerard Manley Hopkins, Inversnaid

As one can see from the quotes above, a love of nature can strongly influence our attitude and behavior toward the environment. This connection with the environment has been with us since we were one cell in the sea, and we have since evolved in close association with our environment. Only recently have we falsely extricated ourselves from nature’s womb and regarded ourselves as separate from this entity. Environmental education attempts to mold students into informed citizens who will work actively toward the maintenance of a diverse, beautiful, and resource-rich planet (Tanner, 1980). In order to further this ultimate goal, we must examine why people form a connection to the environment and how they do so. It is also necessary that environmental education researchers attend to multiple conceptions and constructions of nature.

Environmental education (EE) seeks to instill students with knowledge while simultaneously creating action-oriented citizens. EE is a broad field, one which is
interdisciplinary and can involve students of any age, including adults. The history of the
field has greatly influenced the goals and purposes of environmental education. Deboer
(1991) reports that there was a massive surge of environmental awareness that occurred
in the 1970s and 1980s and that this phenomenon caused environmental and ecological
ideas to start becoming a part of the science curriculum. The Tbilisi Declaration
established three overarching goals of EE; these have provided much of the foundation
for what has been done in the field of EE since 1978 (NAAEE, 2002). These three goals
were listed as follows:

To foster clear awareness of and concern about economic, social, political, and
ecological interdependence in urban and rural areas; to provide every person with
opportunities to acquire the knowledge, values, attitudes, commitment, and skills
needed to protect and improve the environment; and to create new patterns of
behavior of individuals, groups, and society as a whole towards the environment

These goals are unique to the field of EE in that they include the objectives of attitudinal
and behavioral change along with content knowledge and skill objectives. This study
examined in part why someone would engage in the behavior of seeking an intense nature
experience. Although this behavior might not be considered environmental activism, it
can help form a connection between humans and nature or be an expression of a person’s
connection to the environment. This connection is often a necessary precursor to action
(Hungerford & Volk, 1990), which is why a study of several people’s choice to engage in
a nature experience and their connection to nature during this experience supports the overarching goals of environmental education.

Both the Tbilisi Declaration and the Belgrade Charter have continued to be important roots for the field (NAAEE, 2002). However, research and practice goals should always be actively evaluated to ensure that the field grows and evolves. The reviews of research in environmental education by Hart & Nolan (1999) and Hart (2007) reveal not only a drive for a wider range of appropriate methodologies, but an interest in asking what is happening here and why? This expansion will ensure that the goals of EE are appropriate and also that we are working to meet them.

Even though the goals put forth in the Tbilisi Declaration (1978) bring a unity to the field, environmental research is extremely varied. Because of the influence of fields that overlap EE, such as outdoor education and conservation education, it is difficult to define what constitutes environmental education research and where the field is headed (Hungerford, 2010). A majority of the early work in environmental education had an emphasis on forming connections between knowledge, attitude, and behavior within a traditional school setting (Hart, 2007). As the field evolved, Hart and Nolan (1999) found that teacher thinking, student thinking, children’s ideas, and significant life experiences made up the key research areas. Environmental education research began to be more interpretive and socially critical (Hart, 2007).

Currently, there is a severe lack of empirical studies on the topic of “experience of nature and the outdoors” in the environmental education literature. Nature experiences and outdoor experiences are important for prompting responsible environmental
behaviors. If these experiences are known to be of importance, then the nature of these experiences must be understood.

Significant life experience (SLE) research, nature experience research, and research on connections to nature are particularly germane to the proposed project. Literature on environmental education experiences is extremely limited, especially in terms of empirical research. One example of relevant research (Foran, 2005) was a phenomenological study of teachers’ experiences in outdoor programs. The common thread that bound outdoor educators’ experiences was the idea of “intensity.” The author found that for teachers of outdoor education, the outdoor environment magnifies the teaching experience. The outdoors seemed to be more than just space—it was a place that provided value, memories, and identity. The simple reality of being outside the school with students resulted in intense emotions, feelings, leadership, and hands-on learning. Another study, although not directly studying experience, examined conceptions of nature and the role of place in environmental education at a summer camp. One finding of the study was that the everyday experience of wild animals served to open the door for children to increasingly engage with the natural world (Watson, 2006).

Significant life experience (SLE) research is more pervasive in the literature. Nature experience is important in producing citizens who are environmentally active (Tanner, 1980). Many quantitative studies in environmental education report that environmental attitudes become more positive after exposure to some form of environment-related or environmental education (see review by Hart & Nolan, 1999).
SLE research studies the childhood experiences or early formative influences of environmentalists. SLE research participants have been environmental educators (Corcoran, 1999; Furihata, Ishizaka, Hatakeyama, Hitsumoto, & Ito, 2007; Palmer et al, 1998; Palmer & Suggate, 1996, Palmer, Suggate, Bajd, &Tsaliki, 1998; Palmer, Suggate, Robottom, & Hart, 1999), environmental professionals (Sward, 1999 & Chawla, 1999), and environmental activists (Tanner, 1980; Arnold, Cohen, & Warner, 2009; and Hsu, 2009). What all these studies have in common is that childhood experience in nature was found to be important in adult environmentalism.

In studying childhood experiences, SLE studies have looked at the formative influences of environmental educators, environmental workers, and activists. Payne (1999) calls for more variety in participants in this research by arguing that the democratic aims of education give a broader picture of environmentalism, which includes activism, but also includes environmental awareness, sensitivity, and commitment. If SLE research is indeed used to inform environmental education, then there must be a greater understanding of the diversity of experiences and influences that shape a diverse population of environmentalists. This study examined SLEs by using an adult population. It also answered Payne’s (1999) call for more types of participants in SLE research by going beyond environmental activists, environmental workers, and environmental educators. By examining the SLEs and formative influences of the participants, who are seeking an intense nature experience, we begin to see a broader picture of environmentalism, which includes environmental sensitivity and connection to the environment.
Adults have long been neglected in terms of environmental education. An historical analysis of environmental adult education (EAE) by Haugen (2009) found that environmental education has mainly focused on relaying factual knowledge to—and changing patterns of behavior of—children and young adults. This means that environmental education messages were not reaching a diverse audience in terms of age, and as a result, the same students from the same socio-economic class were receiving the same instruction repeatedly. This inability to reach new audiences led to a decrease in the amount of genuine behavioral change that might have been possible (Haugen, 2009). This study examined adult participants in an environmental context to begin to shed light on this population of environmental learners.

People may choose to hike or walk in nature for many reasons: to exercise, relax, renew, view wildlife or scenery, or even commute from one place to another (Lekies & Whitworth, 2011). Another positive element of using an adult group of participants was being able to look at why someone would choose to have an intense nature experience. This environmental behavior was being acted out by adults, who were able to autonomously choose this outcome. This allows for the unique opportunity to examine the act of seeking a nature experience as an environmentally sensitive behavior. For example, it may not seem that someone who chose to hike for exercise purposes is seeking a nature experience, but this individual could have chosen to exercise indoors. The choice to visit the physical place of nature over choosing an indoor space may have been an expression of that person’s connection to nature.
Connection to the environment seems to be as important as experience in terms of pro-environmental behavior. Current standards of living and contemporary lifestyles continue to divide humans from the natural world (Hinds & Sparks, 2008). Louv (2005) speaks to this divide between children and the outdoors with what he terms “nature-deficit disorder” (p. 10), where “nature is more abstraction than reality” (p. 2). Pyle (2008) furthers Louv’s argument with his concern that the “traditional avenue toward natural intimacy is closing down” (p. 157). Originally, nature study allowed children to experience the natural world. When nature study faded away, outdoor play allowed children to feel the sensations of the environment. But now that too is disappearing (Pyle, 2008). Empirical work has also been done on the subject of human connection with nature. The literature reveals that pro-environmental behavior is positively associated with the strength of one’s emotional connection with the natural environment (Hinds & Sparks, 2008). A number of studies use quantitative surveys and questionnaires to measure connectedness to nature. Dutcher, Finley, Luloff, and Johnson (2007) developed a sociometric scale in order to operationalize connectivity with nature. A study done in Germany by Bruegger, Kaiser, and Roczen (2011) analyzed many of the connectedness to nature measures available when developing their Disposition to Connect with Nature Scale. They found that scales which are meant to measure connectedness to nature, environmental identity, or inclusion of nature in one’s self seem to all measure the same concepts.

Examining connection to and conceptions of nature using a qualitative design allowed this study to examine these elements in more depth. Connection to nature as a
precursor to environmental action is supported in the literature. This requires researchers and practitioners to deepen their understanding of human-nature connectedness. This study led to a deeper understanding of this phenomenon through a qualitative research design.

**Study Rationale**

This dissertation study supports and furthers the above literature in a number of ways. It provided a greater understanding of the paths that bring people to interact intensely with nature and the outdoors. Furthermore, it provided a rich description of the lived experience of being in/with nature. This provides the field of EE with valuable insight into how students and adults might experience nature programs and what kind of experiences might produce persons who seek out nature experiences or environmentally caring adults. The findings also have offered ways in which we can grow and develop the goals of the field by investigating how people connect with the environment beyond activism.

This study sought to move along these lines of inquiry and examine the constructions of nature experiences and how these experiences impact the actor’s place-making and in turn are impacted by place. This project also studied why someone would choose to engage in an intense nature experience, and how knowledge is generated during an informal nature experience. SLEs and current nature/outdoor experiences were investigated with a broader scope than in previous studies. Participants chose to have an outdoor experience for reasons such as connection with nature, athleticism or active lifestyle, spirituality, or other reasons that were not directly environmental. The current
study also developed a deeper understanding of people’s connection to nature. Most of the empirical studies regarding human connectedness to nature are quantitative in nature, which has produced a broad but somewhat shallow understanding of this concept. This study explored qualitatively how people connect to nature during an intense nature experience. This provided a greater understanding of the nature of the human connection to outdoor spaces. Figure 1 articulates the elements that this study examined and the relationships among them.

*Figure 1. Elements of the Study*
Purpose Statement and Research Questions

This dissertation explored hikers’ lived experience of nature while thru-hiking the Appalachian Trail. The spelling of the word “thru-hike” is intentional and reflects how the hiking and Appalachian Trail community spell this term. The purposes of this study were to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impact the actor’s place-making and in turn are impacted by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an informal nature experience. The research questions are guided by this purpose. The following specific research questions were explored:

1. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning takes place and how does it occur?
2. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?
3. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature?

**Overview of Methods**

In order to more deeply understand nature experiences, connection to nature, and how space, place, and identity are related, a qualitative research method was used. Guided by the above research questions, I utilized a naturalistic inquiry (Lincoln & Guba, 1985) research design. Data sources consisted of in-depth interviews, observations, and researcher journaling. A constant comparative analysis method (Glaser & Strauss, 1967) was used in data analysis in order to gain a deeper understanding of nature experiences, nature as place, connection to nature, conceptions of nature, and experiential learning. These methods are discussed in more depth in Chapter III.

**Overview of Theoretical Framework**

Critical geography (Helfenbein, 2010) was used as a theoretical lens for this dissertation. In order to employ a critical geography, an analysis of the evolution of space and how it impacts experience, power, and identity, and is impacted itself by these same things, must be undertaken (Helfenbein & Taylor, 2009). Critical geography, in comparison with geography as a field of study, entails examining positionality, borders, orientation, scale, and identity in a holistic manner. It is not only making maps, but also making meaning of maps (Helfenbein, 2010). Space, place, and identity are interconnected in critical geography. Each element of space, place, and identity is formed and reformed in relation to the others. Using this lens allowed me to explicitly attend to identity and place-making in nature, as well as examine the conception of nature.
as a physical place that one may visit, explore, conquer, or protect (Lekies & Whitworth, 2011).

Given the purpose of this study, a review of relevant literature is presented in the next chapter, which includes a brief introduction to the field of environmental education and an overview of EE research. The review of literature will then delve more deeply into the topics of experience in nature and connection to nature.
CHAPTER II

REVIEW OF RELEVANT LITERATURE

The purpose of this literature review is to ground a study on how Appalachian Trail long-distance hikers experience and connect to nature, and on why they chose to have an intense nature experience. Investigating these questions helps researchers to analyze the present goals of environmental education and also to design environmental education to meet these goals. The literature review will begin with a brief introduction to the field of environmental education (EE), including its history and purpose. The review will then investigate more narrowly the topics that directly inform the study.

A Brief Introduction to Environmental Education

“One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise.”

~Aldo Leopold, A Sand County Almanac

Environmental education encompasses many disciplines, such as science, social studies, and art, and can be practiced indoors, outdoors, formally, and informally, with children and with adults. This variability and diversity makes it important for researchers to situate themselves in the broad range of literature on which environmental education draws. This study supports and develops multiple fields within environmental education, such as outdoor education and informal science education. It is therefore relevant to first discuss the history, goals, and current research of environmental education and the fields which influence it.
Definitions of Environmental Education

The words “environment” and “education” did not appear as a phrase in text until the mid-1960’s (Palmer, 1998); although, in 1948 the term “environmental education,” or EE, was used for the first time in speech at the International Union for the Conservation of Nature and Natural Resources (IUCN) in Paris (Taskin, 2003). The term was then used publicly again in 1966 by Laurence Rockefeller at a Parks and Recreation Congress in Washington D.C., and became more widely used after that (Rillo, 1980). There were, however, many different terms used before this time, such as “rural studies” and “environmental studies” (Taskin, 2003). In addition, different movements such as Conservation Education and Nature Study have influenced the field of environmental education (McCrea, 2006), as has organized camping and outdoor education (Rillo, 1964), so that it has become difficult to disentangle the history and scholarship of environmental education from all these other terms and fields.

In light of all the terminology that lends itself to the research and practice of EE, a discussion of definitions for “environmental education” and other related terms is necessary. At the IUCN/UNESCO “International Working Meeting on Environmental Education in the School Curriculum” held in Nevada in 1970, the following definition of environmental education was created (Palmer, 1998):

Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making
and self-formulation of a code of behavior about issues concerning environmental quality (IUCN, 1970).

Ford (1986) gives a number of definitions for the terms associated with environmental education and complementing the history of the field:

- **Outdoor education** is education in, about, and/or, for the out of doors . . .
- **Environmental education** refers to education about the total environment, including population growth, pollution, resource use and misuse, urban and rural planning, and modern technology with its demands upon natural resources . . .
- **Conservation education** is the wise use of natural resources . . .
- **Resident outdoor school** is the process of taking children to a residential camp during school time for a period of usually 3 to 5 days for the purpose of extending the curriculum through learning in the outdoors . . . This was initially termed camping education...
- **Outdoor recreation** means a broad spectrum of outdoor activities participated in during leisure time purely for pleasure or some other intrinsic value . . .
- **Adventure education** refers to activities into which are purposely built elements perceived by the participants as being dangerous . . .
- **Experiential education** refers to learning by doing or experience . . .
- **Environmental interpretation** is a term usually associated with visitor centers administered by national parks or forest service centers . . .

Nature education and nature recreation are learning or leisure activities related to natural resources. (Ford, 1986)
A more compact definition of environmental education is “the presentation of knowledge about the environment and our impact upon it to school students at all levels of education and to the general public” (Rogers, 1982).

These definitions are useful for determining how these activities and terms are related to one another in both a historical and a practical context. Environmental education is such a large, interdisciplinary field, influenced by many individuals and movements, that it would be difficult to engage in research in EE without considering the many roots and branches of the field.

The definition of EE given by IUCN/UNESCO (1970) and the definition offered by Rogers (1982) have commonalities as well as divergent points. This breadth of EE definitions shows the importance of situating oneself in the conversation of what counts as environmental education. I view environmental education as overlapping many other types of education, such as outdoor education. These relationships can be seen in the definitions provided earlier by Ford (1986), as well as in the history of science education, which will be discussed shortly. I see environmental education in two ways: as possessing commonalities with different fields as in Figure 2, and as being influenced by different fields as in Figure 3.
Although these figures depict a number of fields, by no means is environmental education limited to only these influences. Social studies, math, art, and a myriad of other fields can also overlap with environmental education.
This interdisciplinarity is in my opinion one of the most important features in distinguishing environmental education from other types of education. Terms in the IUCN/UNESCO (1970) definition of EE, such as concepts, skills, attitudes, interrelatedness, and culture, are all ideas that can be brought out through focusing on different subjects and fields while practicing EE. Another significant feature of most conceptions of environmental education, and one that I feel differentiates EE from most other fields, is the goal of behavioral change. This is an element of action which necessitates that EE not only deliver some sort of content, but also instill in students a desire to change their behavior, along with teaching the skills to do so.

**History**

Anatomically modern humans evolved 200,000 to 100,000 years ago in Africa (Willoughby 2007), but began living in constructed shelters and cities separate from the environment comparatively late in their evolutionary history (Wilson, 1984). Therefore, as Rillo (1964) so nicely stated, “the tradition of learning to understand and appreciate the natural environment was a part of the heritage of all youth down through the ages” (p. 1). This brief historical outline will summarize key movements throughout history that have influenced environmental education. The fields of outdoor education and conservation education will also be discussed because these fields are heavily intertwined with environmental education.

In order to have environmental education, there must first be environmentalism. A number of early philosophers of the environmental movement have in turn impacted environmental education. The first seeds of environmental education were sown by early
philosophers such as Jean-Jacques Rousseau as far back as the 1700s. Rousseau is considered by many to be the creator of modern progressive education. In his writings, he pointed to nature as a source of moral and spiritual healing (Carr, 2004). Rousseau lived from 1712 to 1778, and in 1762 he published an educational philosophy entitled *Emile*. The book was written in the form of a novel and discussed the idea that the environment should be included in education (McCrea, 2006). Rousseau is not necessarily included in the American history of environmentalism; however, his writings influenced Ralph Waldo Emerson, Henry David Thoreau, and John Muir, who were all early environmentalists with an appreciation for nature. Rousseau can be considered a “pre-environmentalist” because his writings contributed to “nature worship,” which became popular in the Romantic Movement. He also defended nature’s intrinsic value (LaFreniere, 1990).

Another early influence to the field of environmental education was the work of Louis Agassiz. Agassiz was born in 1807 and was a prominent scientist of his time. He published articles in the popular press in order to rally support for his scientific ideas (McCrea, 2006). Agassiz taught at a summer school on an island in Buzzards Bay, and at the end of his classes students drew conclusions from real objects that were brought in. This idea of using real objects for learning is a basis for contemporary outdoor education methods (Rillo, 1980), as well as an early form of science education (DeBoer, 1991). Agassiz would hand out live grasshoppers for everyone to examine while he illustrated the grasshopper’s structure and habits. This example also supports Agassiz’ well-known motto: “study nature, not books.” He said that children should learn about nature
firsthand (Tolley, 1994). Out of Agassiz’ legacy grew the nature study movement. One of the texts that defined the nature study movement was *Nature Study for the Common School*, written by Wilbur Jackman in 1891 (McCrea, 2006). Jackman, the purported “father of nature education,” would take his students from Cook County Normal School outdoors to observe their environment in a scientific way. He encouraged educators to have children study things in their natural setting (Rillo, 1980).

The nature study movement can be considered one of the roots of environmental education (McCrea, 2006), as well as of science education (Bybee & DeBoer, 1994). It took place in the early 1900s. Also involved in the movement was Liberty Hyde Bailey (McCrea, 2006). At the turn of the century, many teachers and teacher educators started to develop an interest in nature study (Dexter, 1958). In the beginning of the nature study movement, Liberty Hyde Bailey (1899) pointed out that there were no actual methods for teaching nature study and that it was not yet a formal part of the curriculum. Bailey claimed that this was nature study’s real value— if it was not part of the formal curriculum it could not become a rigid system, but remain free, “as far removed from the museum and the cabinet as the skeleton is from the living animal” (p. 45).

Nature Study emphasized learning from tangible objects and the natural world, and considered interest to be the motivating force within the student (Bybee & DeBoer, 1994). During the rapid urbanization of the late nineteenth and early twentieth centuries, people saw corruption and disease in the rapidly growing cities. The purpose of Nature Study was to glorify rural life (Atkin & Black, 2007) and to foster an appreciation for the aesthetics of the natural world. However, in the early twentieth century, the Nature Study
movement lost prominence as the leaders of science education became more concerned with the structure of science and generalizable facts (Bybee & DeBoer, 1994).

After Nature Study lost momentum, organized camping became a way for children to connect to the environment. Ford (1986) gives a definition for the term “resident outdoor school,” as “the process of taking children to a residential camp during school time for a period of usually 3 to 5 days for the purpose of extending the curriculum through learning in the outdoors.” His is a newer term for what was originally called camping education, then school camping, and finally resident outdoor school. In the literature, most accounts of the history of organized camping were within the context of outdoor education, not environmental education (Carlson, 2000; Rillo, 1964, 1980; Rogers, 1982). However, outdoor education is one of the roots of environmental education. During the late 1960s, outdoor education and conservation education intersected and produced the field of environmental education (Kirk, 1975), so the history of one is in essence the history of the other. Outdoor education, which stemmed out of the organized camping movement in the 1960s and 1970s, teaches outdoor-related facts, concepts, and skills, and uses the outdoors for both a facility and a medium for teaching. This gave educators another opportunity to explore inventive ways of teaching in nature (Rogers, 1982). Carlson (2000) provides a definition of outdoor education as “a multidisciplinary approach to learning which advocates outdoor direct experiences as extensions of the school classroom” and also indicates that it has no subject matter of its own but is multidisciplinary and cross-curricular (p. 3). Outdoor education provided an
opportunity for students to become valuable citizens living in a democratic society (Carlson, 2000).

Conservation education is another field that is intertwined with environmental education. The conservation education era began in 1935 as a result of the Dust Bowl in the American heartland and the progressive education movement led by John Dewey. Dewey stressed a more student-centered and holistic educational approach. In 1935 the National Education Association took a lead role in promoting conservation education in schools, and a year later The University of Wisconsin – Stevens Point offered the first degree in conservation education. Finally, in 1953, The Conservation Education Association was formed (McCrea, 2006).

Outdoor education, conservation education, and environmental education are related to one another due to their shared histories. The diagram below shows the relationships among these diverse areas. The relationships between them are why they are all relevant fields to include in this literature review.

Outdoor education has historically had two differing approaches, each stressing a different pair of relationships. These two major branches are adventure education and environmental education. Adventure education focuses on intrapersonal and interpersonal relationships and positively changing individuals through wilderness challenges. Environmental education approaches focus on ecosystemic and ekistic relationships and promoting good stewardship of the environment (Priest, 1986). Therefore, in this case, environmental education is a subgroup of outdoor education,
although there is environmental education that does not take place outdoors. The conservation education era, with its roots in the progressive education movement, includes many educational approaches that are important aspects of environmental education today. These include learning by doing, lifelong learning, integrated, and multidisciplinary efforts and others (McCrea, 2006).

According to Kirk (1975, 1980), the field of environmental education experienced a “quantum jump” in its evolution from one field to another. Kirk (1975) stated that the outdoor education movement in American schools came into being in the 1940s. There were two main ideologies during this decade, one being the teaching of outdoor living skills and the other stressing education “in” and “for” the out-of-doors.” Both of these schools of thought stressed recreation—either camp-craft skills or outdoor recreation.

Figure 4. Relationships between Outdoor Education, Conservation Education, and Environmental Education.
The 1950s brought a shift from recreation to teaching the traditional subjects outdoors. In the early 1960s another change took place. Encouraging conservation attitudes in students became the focus and, finally, during the late 1960s, outdoor education and conservation education intersected and produced the field of environmental education. This fusion of the two philosophies occurred because of societal pressure to increase awareness of environmental issues (Kirk, 1975).

Because of these complicated relationships and the fact that different educators will see these relationships differently, there has always been a good amount of confusion over the boundaries between conservation, outdoor, and environmental education (Priest, 1986). Adkins and Simmons (2002) looked at the relationships between outdoor education, experiential education, and environmental education to determine whether they are converging or diverging approaches. They decided that because all of these approaches could be used together in any way and because this combining of approaches seemed to strengthen a lesson that these approaches were in reality mutually supportive (Adkins & Simmons, 2002). This study influences conservation, outdoor, and environmental education, which is why I have included a history of how these fields are interwoven. The argument of Adkins and Simmons (2002) that the approaches of the three fields are mutually supportive of each other reveals the need for studies of environmental education that draw from a wide array of literature and in turn inform a broad world of scholarship.

The mutually supportive nature of these three fields is part of the rationale for why the Appalachian Trail was chosen as the setting for this study. The trail, as a whole,
is not a site for environmental education, but rather a site for recreation. However, in order to perform a long-distance hike, one must possess or learn outdoor living skills. It is also a part of hiking culture to use “leave no trace” practices (Ray, 2009). Therefore, this study showcases the convergence of the fields of environmental, conservation, and outdoor education. Adkins’ and Simmons’ (2002) argument that these fields are mutually supportive is supported by this study and the findings broaden the field of environmental education in order to include more conservation and outdoor education practices.

**Purposes and Goals of Environmental Education**

The politics of certain periods of history have greatly influenced the goals and purposes of environmental education. Deboer (1991) mentions environmental education in his book *A History of Ideas in Science Education: Implications for Practice*. He reports that there was a massive surge of environmental awareness that occurred in the 1970s and 1980s; this phenomenon caused environmental and ecological ideas to start becoming a part of the science curriculum. Post–World War II concerns about water quality, air quality issues in the 1950s, and Rachel Carson’s famous book, *Silent Spring*, are just some of the events that led to increased public concern for the environment. The *Journal of Environmental Education* had its initial publication in 1969 and Congress passed the Environmental Education Act in 1970. This act created the Office of Environmental Education (OEE), which awarded grants to projects that dealt with environmental education at all levels. These occurrences were a sign of the establishment of the modern environmental movement in education and society.
The transcendentalists of the 19th century, the radicals of the 1970s, and the proponents of investigating environmental issues today are well documented in the history of the environmental movement (Geller & Lasley, 1985). In the 1960s, scientists were realizing that there was indeed an environmental crisis happening (Gough, 2006) and The National Environmental Policy Act of 1969 was passed in response (McCrea, 2006). However, these early years of environmental education did not show a unanimous agreement about what the aim of environmental education should be (Tanner, 1998). Two main historical documents eventually provided unanimity in terms of the goals and purposes of environmental education (Hart, 2007). The first was the Belgrade Charter (UNESCOUNEP, 1975). This text offered a goal statement for environmental education that is still extensively accepted (NAAEE, 2002). The charter stated that:

The goal of environmental education is to develop a world population that is aware of and concerned about the environment and its associated problems, and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones. (UNESCOUNEP, 1976, p. 3)

There was also a declaration of the need for environmental education in 1977, entitled the Tbilisi Declaration. It resulted from an intergovernmental conference convened by UNESCO and held in Tbilisi Georgia (USSR) (Hungerford, 2010), and built upon the previous Belgrade Charter (NAAEE, 2002). This brought unity to the newly emerging field of environmental education (Hungerford, 2010). The Tbilisi Declaration established three overarching goals of EE and these have provided much of the foundation for what
has been done in the field since 1978 (NAAEE, 2002). These three goals were listed as follows:

To foster clear awareness of and concern about economic, social, political, and ecological interdependence in urban and rural areas; to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment; and to create new patterns of behavior of individuals, groups, and society as a whole towards the environment. (UNESCO, 1978)

It is important to note that these goals bring together content knowledge and skills with concern, motivation, and attitude. The most salient element of these goals is the educationally innovative push towards advocacy through behavioral change.

Both the Tbilisi Declaration and the Belgrade Charter have continued to be important roots for the field (NAAEE, 2002). This study supports the goals they established in a number of ways. It provides a greater understanding of the paths that bring people to interact intensely with nature and the outdoors. It also provides a rich description of the lived experience of being in/with nature. Choosing to interact with the outdoors and with nature is an example of a pattern of behavior that could foster concern for the environment. Research in this area provides the field of EE with valuable insight into how students and adults might experience nature programs and what kind of experiences might produce environmentally caring individuals or individuals who seek out more nature experiences. Backpacking and hiking are an example of ways in which a person can develop values, attitudes, and commitment to the environment, which ties
directly to the goals of the Tbilisi Declaration (UNSCO, 1978). The findings also offer ways in which we can grow and develop the goals of the field by investigating the ways in which people connect with the environment beyond activism.

**Concise Overview of Research**

Environmental education research is extremely varied. Due to the fact that EE is influenced by nature study, conservation education, outdoor education, ecology education, population education, pollution education, land-use management, threatened and endangered species, biodiversity education, sustainable development education, climate change education, and other fields of education, there seems to be a poorly defined mixture of philosophies about what EE is, what constitutes EE research, and where the field is headed (Hungerford, 2010). Regardless of this issue, EE research has experienced rapid growth within the last fifteen years (Hart, 2007).

Most early work in environmental education emphasized forming connections between knowledge, attitudes, and behaviors within a traditional school setting (Hart, 2007). An analysis of research within environmental education was undertaken by Hart and Nolan (1999), who looked not only at topics of research but at methodology. They found that the 1990s showed a turn in methodological approaches taken by EE researchers. Research went from being almost exclusively quantitative in the 1970s and 1980s to a climate of methodological diversity in the 1990s. The most popular qualitative methods were action research, case studies of curriculum practice and reform, case studies of contexts, case studies of community awareness and action, curriculum
research of school curriculum, curriculum research of informal and public domains, and evaluation studies of status and policy (Hart & Nolan, 1999).

By the 1990s, according to Hart and Nolan (1999), teacher thinking, student thinking, children’s ideas, and significant life experiences made up the key research areas in EE. Research on teacher thinking included both quantitative and qualitative studies on teachers’ attitudes and beliefs, perceptions and values toward the environment, nature, social issues, and education. The findings of a number of these studies were that though elementary teachers had positive attitudes toward EE, they felt unprepared to teach it and were concerned about a lack of support in terms of funding, in-service preparation time, and outdoor facilities and sites. Studies of high school teachers had similar results, although lack of resources was more often cited as a barrier to EE. Studies in teacher thinking also found the importance of personal beliefs and values in teacher thinking and classroom practice. Research on student thinking was noticeably separated by quantitative and qualitative methods. The quantitative studies measured and changed students’ environmental beliefs and attitudes through classroom time, experiential learning, or questionnaires. Qualitative research studied student ideas and preconceptions about environmental issues, the lived experience of students in terms of EE, and student’s ideas, values, and beliefs about environmental education. Research on the topic of children’s ideas often examined meaning-making, knowledge construction, child growth and development in terms of nature and sense of place, children’s conception of nature, and children’s ideas about environment and environmental issues. Most studies in this area regularly found a connection between young children’s experiences and their life-
long values, attitudes, and behavior toward the environment and nature. Significant life experiences research examined the motivation for being an environmental advocate. There was often an explanation of positive childhood experiences, outdoor experiences, and significant adult mentors in the findings of this research. These significant life experiences seem to develop a sense of place and might be important in understanding adult environmentalism (Hart & Nolan, 1999).

Hart (2007) echoes these trends, stating that early research in environmental education was focused on establishing associations between knowledge, attitude, and behavior using objective-based rationalist inquiry. However, in the late 1980s and early 1990s, this research began to be punctuated with research forms that were more interpretive, participatory, community-based, and socially critical. Research and practice started to become more about critical education for the environment instead of education about or in the environment. Environmental education research has come from being mostly unknown, to gaining global recognition, to influencing international policy agreements. The late 1990s saw environmental education research closely tied to science education and science-based school programs, however, this trend has been losing strength. Many of these studies indicated students’ weak knowledge or misconceptions of environmental issues, although these findings have since been contested for weakness of evidence and attempts to quantify knowledge, attitude, and behavior. There is now a shift towards researching questions about the nature of student thinking, and how and why role-modeling, collaborative, community, or outdoor experiences lead to positive learning outcomes. Research has become increasingly concerned with the complexity
and richness of young people’s views of nature and environmentally-minded adults’ significant life experiences. Hart (2007) goes on to describe a current body of EE research which includes outdoor education, experiential education, and global education. Within these topics, students work in various informal settings such as agriculture, ecotourism, botanical gardens, parks, or nature centers (Hart, 2007).

These reviews of research in environmental education reveal not only a drive for a wider range of appropriate methodologies, but an interest in asking what is happening here and why. Environmental education, it seems, has moved away from science education in that “environmental education sees the role of education as a post-empiricist concern with social and philosophical forms of inquiry. Knowledge is generated not only by scientific inquiry, but also by addressing philosophical issues about people’s intentions and predispositions as subjective, interpretive constructions of the democratic process” (Hart, 2007, p. 698).

Experience and Environmental Education

Set the children free. Let them have fair play. Let them run out when it is raining, take off their shoes when they find pools of water, and when the grass of the meadows is damp with dew, let them run about with bare feet and trample on it. Let them rest quietly when the tree invites them to sleep in its shade. Let them shout and laugh when the sun wakes them up in the morning, as it wakes every other living creature.

~Maria Montessori, The Discovery of the Child

You only need sit still long enough in some attractive spot in the woods that all its inhabitants may exhibit themselves to you by turns.

~Henry David Thoreau, Walden

Experience

There are a plethora of studies on the educational and attitudinal outcomes of environmental education programs (see Hart & Nolan, 1999; Hart, 2007; and Hungerford
& Volk, 1990 for literature reviews). However, student experiences of nature, the outdoors, and environmental education programs are less pervasive in the literature, especially in terms of empirical research. Significant life experience research, which explores environmentally caring adults’ formative experiences, has shown that nature experiences during childhood are important in prompting people to take an interest in nature (Chawla & Cushing, 2007), and that this interest in or connection to nature can promote environmentally responsible behavior with greater success than knowledge of environmental systems or issues (Hungerford & Volk, 1990). While this research reveals the importance of experience, an analysis of the nature of these experiences is largely absent.

Sandell and Oehman (2010) write about the educational potentials of encounters with nature in terms of Swedish outdoor environmental education. They argue that shifting the approach of EE away from nature encounters and toward more pluralistic and political approaches would erase the educational potential of nature experiences. They name six educational potentials of nature experiences: (a) “an experience-based meaning of nature” (p. 124); (b) “a relational ethical perspective” (p. 124); (c) the addition of “a fourth perspective to sustainability development . . . [which] is not ecological, economic, or social, but is rather a comprehensive existential perspective that originates from aesthetic and emotional relations with nature” (p. 125); (d) “human ecology in practice” (p. 125); (e) “sensing the quality of a simple life” (p. 126); and (f) “democracy, identity and dwelling” (p. 126). In conclusion, the authors relay that if the quality of nature
experience is to be taken seriously, a greater understanding of the contextual and dynamic concept of nature is necessary.

Pyle (2008) also believes that outdoor experience is important for youth. He argues that:

“No child left behind,” for example, eclipses critical thinking with linear testing, and helps suppress the time-consuming place-based education that all sensible nations should enshrine under the motto “No child left inside.” But children are left inside. I have argued (Pyle 1993) . . . that the extinction of experience resulting from a loss of local diversity necessarily results in a descending spiral of alienation, apathy, inaction, and further extinction: a destructive cycle of alienation and loss. The antidote, many agree, is immersion in the so-called natural world, particularly in those special places where initiation and imprinting on nature take place. (p. 157)

This extinction of experience is revealed to Pyle when he asks people to remember special places in nature that they connect with in some way. Adults respond with places like fields, backyards, forests, and empty lots, but younger people seem to be at a loss to recount personally significant outdoor places (Pyle, 2008).

Environmental education can offer these experiences to people of all ages. However, what do these experiences look like, or what should they look like? Regarding the outdoor environmental education of children, Auer (2008) argues that there is a strong emphasis on hands-on learning and sensory perception, but that this is largely absent in the environmental education of older students. If more sensory learning were to be
included in the environmental education of college-age students, conventional learning modalities such as empirical observation could be reinforced through the explicit use of the external senses. External senses such as taste and touch could also act to break down dualistic conceptions of “people” and “nature” by bringing together knowledge and feeling.

In an empirical study looking at conceptions of nature and the role of place in environmental education at a summer camp, it was found that children’s everyday experiences of wild animals served to open the door for children to increasingly engage with the natural world (Watson, 2006). Foran (2005) did a phenomenological study of teachers’ experiences in outdoor programs. The common thread that bound outdoor educators’ experiences was the idea of “intensity.” The author found that for teachers of outdoor education, the outdoor environment magnifies the teaching experience. The outdoors seemed to be more than just space, it was a place that provided value, memories, and identity. The simple reality of being outside the school with students resulted in intense experiences of emotions, leadership, and hands-on learning.

There is a severe lack of empirical studies on the topic of “experience of nature and the outdoors” in environmental education literature. As the next section of the literature review will reveal, nature experience and outdoor experiences are important in prompting responsible environmental behaviors. If these experiences are known to be of importance, than the nature of these experiences must be understood. This study sought to begin to understand experiences of nature and the outdoors.
**Significant Life Experiences**

A child's world is fresh and new and beautiful, full of wonder and excitement. It is our misfortune that for most of us that clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost before we reach adulthood.

~ Rachel Carson, *The Sense of Wonder*

Significant life experiences (SLE) research contributes to our understanding of how past experiences, mainly childhood experiences, influence our future attitudes and behaviors towards the environment. In order to determine what kinds of learning experiences contributed to environmental activists’ environmental identity, it makes sense to study the early experiences of such persons so that we might replicate these experiences within environmental education (Tanner, 1980). This body of research stems from original work on SLE by Thomas Tanner (Tanner, 1980; Palmer, 1993; Palmer & Suggate, 1996). One aspect of this study was to examine the significant life experiences and formative influences that inspire adults to thru-hike the Appalachian Trail. The act of long-distance hiking is not necessarily equivalent to being an environmental activist; however, given that environmental sensitivity and connection to nature are thought to be precursors to action (Hungerford & Volk, 1990), it is vital that we include this population in SLE research. The literature on SLE provides a pertinent background that informs questions of this nature.

experiences on the development of environmental educators’ concern with and knowledge of the environment. Expanding on these two studies, Palmer, Suggate, Bajd, and Tsaliki (1998) look at the categories of significant life experiences and formative influences on environmental educators from the UK, Greece, and Slovenia. The authors, again, examine the categories of SLE and their importance in the development of knowledge of and concern for the environment. In developing an individual’s concern for the environment, the most influential factor within the UK sample was childhood experiences of nature and the countryside. Negative influences such as media coverage of disasters, the impact of pollution, or environment-related ill health were found to be more influential within Greece and Slovenia (Palmer, Suggate, Bajd, & Tsaliki, 1998). In the original two studies (based in the UK), differences in age groups were and the authors found that all age groups mentioned family and education influences, the older age groups found childhood experiences of the outdoors to be most important, and in the younger age groups, media such as TV, books, and papers were more influential. In the UK, the influence of family, other adults, and teachers was found to be of utmost importance when considering only those factors which were ranked or stated to be the single most important one (Palmer & Suggate 1996). The influence of people was also the most important factor for the Slovenia sample, but only the sixth most significant factor for Greece (Palmer, Suggate, Bajd, & Tsaliki, 1998).

Palmer et al (1998) describe the preliminary analysis of a larger project in which the authors ask that same question to environmental educators from nine different countries (Australia, Canada, Greece, Hong Kong, Slovenia, South Africa, Sri Lanka,
Uganda, and the UK). Although the authors specify the preliminary nature of the analysis, an overview of the findings is discussed. The authors found that direct experiences of the natural world affected over half of the respondents when looking at the nine countries as a whole. However, in comparing the countries, the greatest importance of childhood and adult experiences of nature was found in Australia, Canada, South Africa, and the UK; whereas in Hong Kong, Sri Lanka, and Uganda, enjoying the natural world as an adult ranked most important. In Slovenia, primary education was mentioned more frequently as an influence (although students remain in primary school until the age of 14 in Slovenia), and pollution was particularly important in Greece. Close family was the second-most influential factor in Australia, Canada, Slovenia, South Africa, and the UK, but ranked much lower in Greece, Sri Lanka, and Uganda. Negative influences were also mentioned by all countries (Palmer et al, 1998). The results of these four studies suggest that childhood experience in nature is incredibly influential. Environmental education program designers, whether formal or informal, must take this into consideration when designing programs for young students. Also of consideration are negative experiences, adult nature experiences, media, and people. School was almost never reported as being among the most important group of factors. This supports the idea that knowledge and formal learning should not be the main form of environmental education (Hungerford & Volk, 1990). It would seem that in order to care for and connect to the environment, experiencing it is very important. This idea of connection to nature will be discussed further in a later section of the literature review.
Another relevant study on significant life experiences of environmental educators was the first research of this kind in Japan (Furihata, Ishizaka, Hatakeyama, Hitumoto, & Ito, 2007). This study analyzed questionnaires completed by 188 environmental educators and 12 follow-up interviews, along with questionnaires from 25 community center members used as a control group, to determine which nature experiences during formative life experiences influence environmental educators’ responsible environmental behavior (REB). Results from the questionnaires showed that environmental educators chose different REB categories corresponding to their choices of each SLE category. The REB of “consumption” (actions related to the purchase, use, and disposal of items) was strongly connected to the SLE of “nature experience” (experiencing nature through games, activities, walks, etc.); the REB of “promotion” (recycling, establishing nature clubs, etc.) was strongly connected to the SLE of “nature experience;” and “nature experience” as REB was also strongly connected to the SLE of “nature experience.” The authors defined a nature experience not only as a SLE but also as a REB that one could undertake in the present. The REB of “consumption” was also connected to the SLEs of “feeling the reality of losing nature or the environment” and “family.” However, when “consumption” was excluded, the relationships between “nature experience REB” and “nature experience SLE,” “participation REB” and “nature experience SLE,” and “promotion REB” and “nature experience SLE” became stronger. This shows how important nature experiences are during childhood. However, after the interviews, the authors were unable to find many answers that directly connected childhood nature
experiences to current nature-related activities. It seems that a more in depth study is needed to answer lingering questions of how SLE influences REB.

An SLE study by Catling, Greenwood, Martin, and Owens (2010) did not look specifically at environmental educators, but at the formative life experiences of teacher educators and teachers in the UK and Ireland who are involved in supporting geography education in primary school. A grounded theory approach was used to analyze the autobiographical memories written by participants as responses to a questionnaire. Both informal or personal experiences and formal education experiences were found to be important factors. Within informal experiences, outdoor experiences or “freedom to roam” and outings or trips were particularly important. Within formal education experience, fieldwork was important in primary school, secondary school, and university. Just as other SLE studies have shown, the results of this study suggest that enjoyment of the outdoors formally and informally can influence “a love of landscape, the natural environment and ‘exploration’” (Catling, Greenwood, Martin, & Owens, 2010, p. 349).

Environmental professionals are also subject of significant life experiences research. Sward (1999) investigated the significant life experiences of El Salvadoran environmental professionals to identify patterns in life experiences involved in the development of environmental sensitivity. The study used the Environmental Sensitivity Profile Instrument (ESPI), which includes a structured interview section. The ESPI was translated into Spanish and administered to 17 El Salvadoran environmental professionals, 14 men and 3 women. Outdoor experiences were cited by 88% of the sample as being highly influential to the development of their environmental sensitivity.
Other significant life experiences, ranked in descending order, were environmental destruction, formal education, outdoor-related organizations, environmentally oriented jobs, raising animals/plants, being born with an affinity for nature, teachers and peers, and concern for future generations. In a related study, 30 environmentalists from Kentucky and Norway working in a range of capacities—such as recycling, waste management, pollution and radiation, transportation, land use planning, habitat and wildlife preservation, and environmental education—were the participants for a phenomenological study that investigated different life paths into effective environmental action (Chawla, 1999). Structured, open-ended interviews were conducted that analyzed the sources of environmental commitment and when these experiences occurred. Participants seemed to characterize their stories with a combination of chance, such as being born into a certain family in a certain place, and continuity, such as environmental experiences building towards attitudes and behavior. The experiences that participants attributed to their commitment to environmental protection consisted of (in descending order) experience of natural areas, family, organizations, negative experiences, education, influence of friends, vocation, sense of social justice, book or author, principles or religion, and concern for children or grandchildren. The interviews also revealed two distinct paths into environmentalism: a concern for the environment and a concern for social justice. One difference between participants from Norway and those from Kentucky were that a number of Norwegians’ outdoor experiences were “just being Norwegian,” while some from Kentucky presented outdoor experiences as something that made them special.
Both of these studies relate the importance of experiences in nature for inspiring an environmental career. The discussion of the results in the Sward (1999) study was quite limited, so it is difficult to determine if concern for future generations, environmentally oriented jobs, and some of the other factors cited are actually significant life experiences that happened previously in life, or ones which are happening currently. However, it is again clear that outdoor experiences are important in the formation of an environmental identity and/or responsible environmental behavior.

Significant life experiences research often looks into environmental activists (Arnold, Cohen, & Warner, 2009; Hsu, 2009; Tanner, 1980). In fact, the original work in significant life experiences used environmental activists as participants (Tanner 1980), and much of the SLE research since has stemmed from this foundational piece. Tanner (1980) studied autobiographical statements of active, informed citizen conservationists. The autobiographical statements included information on the formative influences and experiences that participants believed led them to an environmental path. Childhood experiences of the outdoors and nature were found to be a dominant theme. Parental influences, negative environmental experiences, and books were also found to be important in adult environmentalism.

Arnold, Cohen, and Warner (2009) looked at the SLE of youth environmental leaders involved in environmental action. In-depth interviews revealed that parents, experiences outdoors in childhood, friends, role models, teachers, youth groups, and conferences or gatherings influenced youth leaders’ environmental action. Hsu (2009) investigated the significant life experiences of environmental activists in Taiwan through
autobiographical accounts as well as questionnaires. The autobiographical accounts revealed 17 categories of significant life experiences: natural experiences, formal education, adult education, parents or relatives, friends, vocation, loss of beloved natural places, fear of pollution/environmental disasters, environmental organizations, student organizations, books or authors, principles or beliefs, social justice, and religion. The second part of this study used questionnaires to examine the SLEs of respondents with a high level of environmental action in comparison to those with a low level of environmental action. The SLEs identified in the first part of the study distinguished environmental activists from those who are apathetic towards environmental protection. T-tests showed significant differences between the SLEs for both groups and effect size revealed that books or authors, environmental organizations, social justice, friends, environmental principles, and loss of beloved natural places had a large effect size, whereas parents or relatives, religion, and primary or secondary education had the lowest effect size.

SLE studies have, for the most part, looked at the formative influences of environmental educators, environmental workers, and activists. There is however debate among scholars about which participants make the best subjects for these types of projects. Tanner (1998) argues that it is a fundamental error to study environmental educators or other populations, instead prioritizing environmental activists. He uses the goals of environmental education, put forth in the Belgrade Charter and Tbilisi Declaration of promoting an educated citizenry who would work actively toward a final goal of sustaining a diverse, beautiful, and resource-rich planet for future generations—to
support his argument. Because his original work in SLE was done with environmental activists, he was “disappointed that more researchers have not kept fully in mind the rationale for the original study” (Tanner, 1998, p. 400). Tanner (1998) asserts that only politically active citizens can preserve ecological integrity and that SLE research should therefore investigate the kinds of learning experiences which produce such persons in order to inform the practice of environmental education (Tanner, 1980 & 1998).

Not all researchers agree with this reasoning. As can be seen from this literature review, numerous SLE studies have included environmentalists that are not considered by Tanner’s (1998) definition to be activists. Payne (1999) takes a different approach by arguing that the democratic aims of education give a broader picture of environmentalism, which includes activism, but also includes environmental awareness, sensitivity, and commitment. He believes that SLE research should broaden, not narrow, its scope of understanding in order to encompass the range of paths toward different environmental outcomes in terms of different individual’s identities and construction of experiences. “There is a place in research for both ‘right’ and ‘wrong’ subjects if we wish to know more about the ‘democracy of experience’ and less about curriculum models that prioritize some experiences because they might cause some to be active” (p. 370).

This study examined the SLEs behind, and current reasoning for, Appalachian Trail thru-hikers’ choice to engage in an intense nature/outdoor experience. This takes SLE research beyond activists, beyond environmental educators, and beyond environmental workers to study participants who want to connect with the environment
or have a nature/outdoor experience for reasons other than, or in addition to, activism.

This research reveals how different individuals construct and reconstruct environmental/outdoor experiences by looking at SLEs in tandem with current environmental/outdoor experiences. Furihata, Ishizaka, Hatakeyama, Hitsumoto, and Ito (2007) considered nature experience as a significant life experience when experienced in the past and as a responsible environmental behavior when sought out in the present. This study considered environmental experience in much the same way by claiming that seeking a nature experience is an environmental behavior. The behavior of seeking an environmental/outdoor experience through engaging in an intense nature experience, such as hiking the Appalachian Trail, could be an expression of environmental sensitivity or connection to nature. Environmental sensitivity and connection to nature are supported in the literature as being more important than knowledge of environmental issues in terms of environmental activism (Hungerford & Volk, 1990). This study furthers SLE research by specifically examining this behavior.

This leads into another gap in the SLE research that the current study attempts to fill. Current SLE literature has only investigated formative influences that are environmental in nature, such as nature experiences, negative environmental experiences, people, education, and others, which all revolve around a context of environmentalism. The current study investigated SLEs and current nature/outdoor experiences with a broader scope. Participants chose to have an outdoor experience for reasons such as connection with nature, athleticism or active-lifestyle, spirituality, religion, as well as other reasons that are not directly environmental. If SLE research is indeed used to
inform environmental education, then the diversity of experiences, influences, and reasoning investigated in this study could broaden the types of experiences offered through EE. Chawla (2001) supports this reasoning with the assertion that it is important for EE researchers to deepen their understanding of the different motivations for different groups of people, such as activists, teachers, citizens, students, and politicians, and to realize that people belong to different groups at different times in their lives. Activism is not the only “correct” outcome of environmental education. Outcomes such as science teachers, environmental educators, activists, poets, authors, artists, and even people who “merely” have a spiritual or personal connection with nature or the aesthetics of the outdoors are equally valid. The actual environmental impact of individuals and groups over time would be impossible to measure, therefore who can say if Rachel Carson has impacted the environment more than Henry David Thoreau? This research attempted to look beyond the typical environmental individual in order to expand and develop the construction of what it means to be environmental.

**Adult Nature Experience**

> Alone cruising serenely through the woods, is a situation that nurtures emotional liberation.  
> ~David Miller, *AWOL on the Appalachian Trail*

Some moments on the trail were awe-inspiring. Many days were full of picturesque moments: the path lined with blue wildflowers, areas overrun by blooming pink rhododendron and white mountain laurel, the beckoning trail weaving through trees and boulders, the smell of the firs, exposed summits showing limitless horizons of mountains, rolling fields of hay and corn with an old barn in the backdrop. My mind is saturated with these memories.  
> ~David Miller, *AWOL on the Appalachian Trail*
Choosing to engage in a nature experience can be considered an environmentally responsible behavior (Furihata, Ishizaka, Hatakeyama, Hitumoto, & Ito, 2007). There are many reasons why an adult would choose to have a nature experience like hiking a trail or walking in a park. Reasons can be mental or physical, such as wanting to enjoy nature or engaging in physical fitness (Lekies & Whitworth, 2011). A nature experience could also be thought of as a spiritual activity (Marsh, 2008). The experiences people have in the outdoors are as diverse and variable as their reasons for seeking them.

One of the many nature/outdoor activities that people engage in is hiking. One study on hiker experiences attempts to identify the underlying dimensions influencing park visitor experiences through natural landscapes (Chhetri, Arrowsmith, & Jackson, 2004). Chhetri, Arrowsmith, and Jackson (2004) use a psychophysical perspective to look at how experiences develop through tourist-landscape interactions wherein aesthetic engagement with a landscape will produce varying levels of pleasure and relaxation. The authors quantitatively examined hiker experience in the Grampians National Park through questionnaires which were a combination of Likert and open-ended response items. The experiential variables that were uncovered were attracting, relaxing, exciting, pleasing, motivating, boring, tensing, enjoying, stimulating, challenging, and enclosing. The authors also found that views were more attractive to the hikers than forest-stands and open/rocky areas. Four key experience components were also identified: a desirable experience, which is an experience that is expected by someone when visiting a park; an impelling experience, which was when a hiker wanted to move on and learn more; an apprehensive experience, which were apprehensive feelings; and a social interaction
experience, which were feelings of isolation and crowding (Chhetri, Arrowsmith, & Jackson, 2004).

Another study explored the landscape encountered by hikers and how hikers experienced these landscapes. Hully IV and Stewart (1995) began by operationally defining experienced landscape as “(a) the encountered landscape, that is, the views, people, and/or objects in the landscape that are actually seen or encountered while one is in situ, engaged in a site-relevant task (such as hiking); (b) the sequence in which the scenes or objects are encountered; and (c) the feelings, thoughts, and other subjective qualities that are experienced concurrently with these views” (pp. 407-408). The researchers used participant photography along with experience sampling, in which they interrupted hikers in situ randomly to fill out a questionnaire. Day hikers in the White River National Forest in Colorado were recruited on site. Hikers were randomly interrupted by a cassette tape player and instructed to take a picture of whatever they happened to be looking at, and then fill out a one-page survey. Data was analyzed using chi-square tests to examine the relationships between object type, object distance, and hiker characteristics. Analysis showed that hikers with differences in hiker expertise were not significantly different in the objects that they viewed; however, they were more likely to view objects that were distant. This means that environmental novelty affects one’s experience, and familiarity impacts where one looks. Males were found to view more topography, ground, and ephemeral objects, whereas females were more likely to view objects like signs and themselves. ANOVAs revealed that views with elements of
water or mountains were rated as more scenic, more exciting, and more satisfying than views with ephemeral features, vegetation, or other people (Hully IV & Stewart, 1995). The studies of Chhetri, Arrowsmith, and Jackson (2004) and Hully IV and Stewart (1995) looked at landscape components of nature/the outdoors. These studies uncovered that there is a quality element to a nature experience; both found that vistas, or views, make an experience more enjoyable for many hikers. Both studies looked at discreet pieces of landscapes and how these elements influenced visitor experiences, but nature experiences occur in places that are whole entities where multiple factors can influence one’s experience. Furthermore, neither of these studies reveal the nature of a hiker’s outdoor experience. This study enabled a deeper examination of hikers’ experiences through in-depth, qualitative interviews.

A study on how visitors’ perceptions of a trail environment affects their experiences was done on the Appalachian Trail in Great Smoky Mountains National Park (Dorwart, Moore, & Leung, 2010). Dorwart, Moore, and Leung (2010) describe the multi-faceted nature of experience with their phrase “web of experience” (p. 34). The authors argue that it is important to understand this web because a hike on the AT can bring up childhood memories of family trips, and “experiences in natural settings can create or strengthen a host of other interwoven strands and have long-term effects on a person’s experiences as well as how that individual views and acts toward nature in the future” (p. 34). The study examined 33 day-hikers’ experiences through Visitor Employed Photography (VEP), respondent photo logs, and post-trip interviews. Participants took pictures along the trail and used a photograph log booklet to record
details about their experiences related to each picture. Constant comparative data analysis revealed that participants noticed both positive and negative elements of the trail environment. Both positive and negative trail attributes reflected the same four perceptual themes: nature-oriented details, scenic values, management influences, and presence of other people. The theme of depreciative behavior was the only theme which was consistently a negative element. Although all participants reported both positive and negative elements, interviews showed that participants all indicated having an overall positive experience. Also, participants’ perceptions were dominated by nature-oriented details, such as plants and animals, which were mostly reported as being positive, although a few experienced fear and anxiety. The authors conclude that visitors’ awareness, inclinations, and experiences were multifaceted. They recommend that the complex association of an entire person to the environment must be examined to understand outcomes of human interaction with the natural world (Dorwart, Moore, & Leung, 2010).

This study also examined AT hikers and the interwoven strands of the participants’ web of experiences, such as childhood experiences, formative influences, AT hiking experiences, place-making, and connections to and conceptions of nature. Using AT thru-hikers instead of day hikers as participants, as well as having extended contact through in-depth interviews with participants, will help to answer Dorwart, Moore, and Leung’s (2010) call for a deeper examination of the human-nature experience and the human nature-connection.
The environment can also offer educational opportunities to adults. Long distance hiking, camping, birding, and other outdoor pursuits provide an arena for learning outdoor skills, organism identification, ecology, and even an appreciation for nature. Environmental education has mainly focused on relaying factual knowledge to, and changing patterns of behavior of, a non-adult audience (Hougen, 2009). An historical analysis of environmental adult education (EAE) by Haugen (2009) found that environmental education messages were not reaching a diverse audience in terms of age, and as a result, students from the same socio-economic class were receiving the same instruction repeatedly. This inability to reach new audiences led to a decrease in the amount of genuine behavioral change that might have been possible (Haugen, 2009).

The current study examined adult participants in an environmental context, which will begin to shed light on this population of environmental learners.

**Nature Dis/Connection**

We cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well—for we will not fight to save what we do not love. ~Stephen J. Gould, *Eight Little Piggies*

Connection to, and love for, the environment can be a powerful force for pro-environmental behavior. Part of the goal of environmental education set forth in the Belgrade Charter “is to develop a world population that is aware of and concerned about the environment and its associated problems” (UNESCO/UNEP, 1976). The Tbilisi Declaration also put forth goals of values, attitudes, and commitment (UNESCO, 1978). These goals are indicative of a personal connection with nature, for just as Gould (1993) claimed, “we will not fight to save what we do not love” (p. 40).
Current standards of living and contemporary lifestyles continue to divide humans from the natural world (Hinds & Sparks, 2008). Louv (2005) speaks to this divide between children and the outdoors with what he terms “nature-deficit disorder” (p. 10), where “nature is more abstraction than reality” (p. 2). He argues that there has been a criminalization of natural play—many US communities have stringent restrictions on outdoor play because of the fear of lawsuits. Children need nature in order to develop the senses, but instead have overwhelming sensory input, which is so narrow and “wired” that “that which cannot be Googled does not count” (p.67). Experience in nature can nurture creativity, help children concentrate, restore our minds, and keep children and adults fit and active. Lack of education, ecophobia, and the faster pace of modern life are all boundaries between children and the direct experience of nature (Louv, 2005). This lack of childhood play in the outdoors shows an increased disconnection between humans and the environment.

Pyle (2008) furthers Louv’s (2005) argument with his concern that the “traditional avenue toward natural intimacy is closing down” (p. 157). Originally, nature study allowed children to experience the natural world, and when nature study faded away, outdoor play allowed children to feel the sensations of the environment. Now that too is disappearing. Pyle (2008) talks about adult connections to nature as well. When he lectures groups of environmentalists, students, etc. he “ask[s] them to imagine their special place of childhood – the spot you blame or bless for being here” (p. 157). This use of the phrase “special place” by Pyle shows a connection to some outdoor place that has a special meaning to a person.
The ability of humans to connect with nature could very well be due to the fact that we have evolved in close association with other lifeforms. Our survival has been tied to nature and our ability to interact with it. E. O. Wilson’s (1984) biophilia hypothesis, literally meaning “love of life,” argues that our attraction to certain life forms, habitats, and natural objects is due to our biological and genetic past. “The destruction of the natural world in which the brain was assembled over millions of years is a risky step” (p. 121). When it comes to conservation, Wilson speaks to the idea that in order for humans to preserve our species and personal genes, the conservation ethic is a survival strategy. Wilson further explains biophilia in a book edited by himself and S. R. Kellert (1993):

The biophilia hypothesis goes on to hold that the multiple strands of emotional response [to other living things] are woven into symbols composing a large part of culture. It suggests that when human beings remove themselves from the natural environment, the biophilic learning rules are not replaced by modern versions equally well adapted to artifacts. Instead, they persist from generation to generation, atrophied and fitfully manifested in the artificial new environments into which technology has catapulted humanity. (Wilson, 1993, pp. 31-32)

Therefore, we will keep striving for a connection with nature, our evolution an ever-present driving force. However, the biophilia hypothesis also says that nature provides aesthetic, affective, intellectual, and spiritual benefits that go beyond mere survival (Wilson, 1993). The proposed study seeks to support the theoretical work by Wilson and others by empirically investigating why and how humans connect to nature and the outdoors.
Empirical work has also been done on the subject of human connection with nature. The literature reveals that pro-environmental behavior is positively associated with the strength of one’s emotional connection towards the natural environment (Hinds & Sparks, 2008). A number of studies use quantitative measures and questionnaires to investigate connectedness to nature. Dutcher, Finley, Luloff, and Johnson (2007) developed a sociometric scale in order to operationalize connectivity with nature. The authors investigated the extent to which environmental concern and behavior could be predicted by a high level of connectivity with nature. They gathered their findings based on a mail survey of Pennsylvania landowners, which they analyzed with multiple regressions analysis. It was found that a high level of connectivity with nature had a positive relationship to environmental concern and behavior. Mayer and Frantz (2004) also developed a connectedness to nature scale (CNS), which they claimed measured “one’s experiential emotional connection to nature” (p. 504). Perrin and Benassi (2009) reexamined the CNS using the original data, collecting and analyzing data of their own, as well as conducting a content analysis of the scale items. The authors determined that the CNS in actuality measures cognitive beliefs and not emotional connections. These studies show that it is difficult to measure actual human connection to nature. Neither study answers how or why people connect to the outdoors.

A study done in Germany by Bruegger, Kaiser, and Roczen (2011) analyzed many of the “connectedness to nature” measures available when developing their Disposition to Connect with Nature Scale. They found that scales meant to measure connectedness to nature, environmental identity, or inclusion of nature in one’s self have
substantial convergence amongst themselves (Brugger, Kaiser, & Roczen, 2011). It is unclear in the discussion whether this is due to these instruments measuring the same cognitive factors or if these concepts are too hard to tease apart from one another in a quantitative manner.

A mixed-methods study explored conservation volunteers’ psychological connection to nature through surveys and interviews (Guiney & Oberhauser, 2009). The authors found that most volunteers felt a connection to nature that began when they were children. The motivating factors for why the participants volunteered were as follows: to learn about nature, benefit nature, teach others about nature, and to stay connected to nature. Personal benefits to volunteering such as stress reduction, relaxation, and exercise were also mentioned (Guiney & Oberhauser, 2009).

The current study developed a deeper understanding of people’s connection to nature. Most of the empirical studies regarding human connectedness to nature are quantitative in nature, which has produced a broad but likely shallow understanding of this concept. This study qualitatively explored how people connect to nature during an intense nature experience. This provides a greater understanding of the nature of the human connection to outdoor spaces.

Environmental education has previously worked under the model that environmental knowledge leads to environmental awareness, which then leads to environmental action. Through a critical review of EE literature, Hungerford and Volk (1990) show that knowledge is only one factor leading to action. Attitude, locus of control, and personal responsibility, along with action skills, knowledge of action
strategies, knowledge of issues, situational or contextual factors, and the intention to act are all elements that impact responsible environmental behavior (Hungerford & Volk, 1990). Hungerford and Volk (1990) also argue that environmental sensitivity has been revealed in the research literature as having a powerful connection to behavior. They write that environmental sensitivity is often not associated with formal education and is instead “a function of an individual’s contact with the outdoors” (p. 14). Environmentally sensitive individuals reported engaging in outdoor leisure activities, such as fishing or camping, periodically over long periods of time (Hungerford & Volk, 1990).

This study explored hikers of the Appalachian Trail as people who are engaging in an environmentally sensitive behavior. Examining the lived experience of hiking in nature, place-making in nature, and forming connections in and with nature informs environmental education practices in terms of creating not only environmentally active citizens, but environmentally sensitive citizens.

Environmental Education Within Science Education

As argued above, this study fills a number of gaps in environmental education research, but it also informs the field of science education. The National Science Education Standards (NRC, 1996) state that part of scientific literacy is being able to “identify scientific issues underlying national and local decisions and express positions that are scientifically and technologically informed. A literate citizen should be able to evaluate the quality of scientific information on the basis of its source and the methods used to generate it” (p. 2). Although scientific literacy has been used as a very broad
term to encompass a wide range of educational goals, the importance of the relationship between science and society came together with the advent of science-technology-society (Bybee & DeBoer, 1994). In the new Framework (2011), students are required to meet standards pertaining to socioscientific issues (SSI), previously called science technology and society (STS) issues. Sadler (2004) states that scientific issues that have societal implications, such as stem cells, global warming, and alternative fuels, will continue to be a concern to the general public, as well as political decision makers. Therefore, in order for students to become successful, scientifically literate citizens in a democratic society, they must be aware of socioscientific issues and also have strategies to cope with them and make informed decisions. This study has implications on the fields of scientific literacy and SSI.

Science content is often used to debate societal issues, such as genetically modified foods and climate change. Educating students on the science involved with these issues is one way many science teacher educators and scientists alike hope to support better discussion and less conflict (Rose & Barton, 2012). One study looked at the use of SSI in a 5th grade classroom. Teachers were able to embed Earth science, life science, and physical science into controversial social issues. Not only did SSI provide a vehicle for scientific content, but it also helped to engage students (Dolan, Nichols, & Zeidler, 2009). This study reveals that science content is an important component of SSI, but also that SSI supports the teaching of science content.

Argumentation is another strategy often associated with teaching SSI in science classrooms. Argumentation in science classrooms has a number of benefits.
Socioscientific issues are the usual outlet for this type of instructional strategy. Argumentation in the form of informal discussions and formal debates play an important part in how students think about socioscientific issues (Zeidler, 1997). Sadler (2004) also found a number of reasons why argumentation and SSI support each other and lead to student learning. Explicit instruction in SSI and argumentation was found to lead to improved knowledge in some cases, and improved knowledge along with improved argumentation skills in other cases. The inclusion of SSI in classrooms was also found to aid students in learning how to cite empirical evidence, appreciate social and cultural influences, and compartmentalize personal and social knowledge, which is important in being able to form an argument (Sadler, 2004).

Science content and argumentation are important in the teaching of ecological and environmental SSI. However, there is a missing element that, combined with science content and argumentation, could support the teaching of SSI more completely. Allowing children to experience and connect with nature, the outdoors, or other species would help them to connect with socioscientific issues in a more authentic manner. Currently, much of science education is conducted in indoor classrooms in K-12 schools. A study by Eick (2012) showed that using an outdoor classroom and nature study supported science learning. In order to be scientifically literate, students must meet science content standards, evaluate science information, and make informed decisions. In the study by Eick (2012), nature study connected to a number of state course-of-study standards. The outdoor classroom supported inquiry learning and became a meaningful context to aid children in connecting to science learning. When scientific issues that are
directly applicable to students’ communities or lives are present in the curriculum, students have an increased motivation to learn science.

In a critical review of literature related to informal reasoning and socioscientific issues, Sadler (2004) found that the presentation of SSI provided students with a personal connection to a local issue and that this improved students’ argumentation skills. The presentation of accessible SSIs that incorporated immediate problems in students’ communities encouraged students to integrate their personal and scientific knowledge (Sadler, 2004). Both of these studies show that when students have a personal connection to their knowledge and science issues, learning can be increased. Similarly, another study revealed that involving students in decision-making about an authentic SSI with the use of a prescribed decision-making format allowed students to learn scientific concepts as well as develop their decision-making skills in terms of ecological issues. The specific SSI that students were studying was a local bat conservation issue (Lee & Grace, 2010).

Connection to knowledge and issues seems to be an important factor in SSI research. This is also the case in environmental education. Environmental education, like general science and SSI instruction, is dominated by teaching information and concepts. However, Hungerford and Volk (199) argue that the EE research shows that providing information alone does not develop the skills that students need to be a responsible, participating citizen. Issue awareness does not lead to behavioral change (Hungerford & Volk, 1990). Argumentation can help to ameliorate this by giving students the tools to make informed decisions, but again, there is still something missing. Connection to the environment and experience of nature spaces can round out SSI
instruction and create citizens who are environmentally active because they feel a
connection with the environment.

The proposed study looks at connection to nature during a nature experience, and
it could support science education researchers and teachers in including “connecting to
nature” as an instructional strategy in SSI. SSI is already supported by science content
and argumentation—personal experience with, and connection to, environmental spaces
or issues will further the aims of SSI instruction in science classrooms. This study
furthers our understanding of how people connect to nature and the outdoors during
outdoor experiences. This deeper understanding of the human connection to nature will
allow science education researchers as well as science teachers to utilize connection and
experience in the teaching of SSI in an effective manner.

Inquiry has historically been a very important element in science education
(DeBoer, 1991), and recent science education reform efforts have been centered around
inquiry instruction (Bell, Smetana & Binns, 2005). The National Science Education
Standards (NSES, 1996) define inquiry as “the diverse ways in which scientists study the
natural world and propose explanations based on the evidence derived from their work”
(p. 23). Scientific inquiry also refers to the activities through which students develop
knowledge and understanding of scientific ideas, as well as an understanding of how
scientists study the natural world (NRC, 1996)

The idea of inquiry as an instructional strategy for the teaching of science goes
back to John Dewey, who encouraged active involvement of the learner (student) in
adding to their personal knowledge of science, with the teacher taking on a facilitator role
Joseph Schwab (1966) also recommended the teaching of science as inquiry. Schwab makes a distinction between teaching students to develop the ability to reason through inquiry and “continue[ing] to route our publics through an indoctrinational program of unquestioned dogma” (Schwab, 1966, p. 8). The National Research Council (NRC) reintroduced inquiry in 2011 in its new framework for K-12 science education. This framework conceptualizes inquiry for science educators and places more importance on the teaching of science as inquiry than did the previous National Science Education Standards (NSES) (NRC, 1996 & NRC, 2011).

Minner, Levy, and Century (2010) synthesized findings from research between 1984 and 2002 in the field of inquiry in science education in order to address the question of the impact of inquiry science instruction on student learning outcomes. The study results indicated that a majority of studies (51%) showed that inquiry instruction had positive impacts on student content learning, some (33%) showed mixed impact, 14% showed no impact, and only 3 studies (2%) indicated a negative impact of some level of inquiry instruction on student content learning and retention. There was however no statistically significant association between the amount of inquiry saturation and increased student science conceptual learning. Despite the best of efforts, the impact and feasibility of inquiry instruction in science classrooms often seems to be questioned (Minner et. al., 2010). Crawford (2007) identifies a myriad of complex interactions that might interfere with the success of inquiry-based science teaching: conflicting views of teachers, students, school board, and administration, subject matter, high stake
standardized testing, parental pressure, and the teacher’s education and prior research experience.

Environmental education is often tied to experiential education. In fact, the inclusion of environmental education in the science curriculum can support the use of inquiry. A study by Bell et al. (2003) involving the ENVISION program engaged teachers in professional development involving inquiry and environmental science. ENVISION is a professional development program that helps teachers use inquiry in their classrooms, funded by the National Science Foundation. The ENVISION institute allowed the participants of the study to engage in the inquiry process and build content knowledge and pedagogical techniques for teaching environmental science. One part of the project involved teachers performing a field-based research project. Through ENVISION, teachers experienced inquiry in the context of environmental science, and findings suggest that this led to an increase in knowledge of inquiry-based teaching and learning. Another study, by Davies, Collier, and Howe (2012), used position-linked datalogging to develop inquiry skills in primary students in the UK. The students used GPS software along with sensor data and Google Earth to visualize environmental quality near their schools. Results indicated that students developed a range of science inquiry skills and that activities like this could support relevant science inquiry.

There are many barriers to the teaching of science as inquiry (Ochangi, 2008). In order to increase inquiry in the classroom, researchers must find ways to support science teachers in the use of inquiry. As the studies cited above show, environmental education could aid in the teaching of science as inquiry. One of the questions that this study
explored is how experiential learning takes place during a nature experience. This could
give researchers a greater understanding of how to incorporate authentic inquiry and
experiential learning in environmental education and science education. With a greater
understanding of how experiential learning happens in a non-controlled, outdoor
environment, researchers can design teacher education and professional development
programs to support this type of learning in classrooms.

Science teacher education programs do not currently have a focus on
environmental education. Not only is environmental education missing from science
teacher preparation programs, but it is not a required content area of any teacher
education program in US universities (McKeown, 2000). One goal of the proposed study
is to investigate the significant life experiences and formative influences of participants
who sought an intense nature experience. The literature shows that these childhood
experiences are important to subsequent adult environmentalism (Corcoran, 1999;
Furihata, Ishizaka, Hatakeyama, Hitsumoto, & Ito, 2007; Palmer et al, 1998; Palmer &
Suggate, 1996, Palmer, Suggate, Bajd, & Tsaliki, 1998; Palmer, Suggate, Robottom, &
Hart, 1999). If children are to have the opportunity to experience environmental
education and nature in K-12 science education, educational policy needs to consider the
research supporting these types of experiences. In order to be informed citizens with the
ability to make decisions regarding the natural environment, there needs to be explicit
instruction about that environment and human interaction with it. In order for this direct
environmental education instruction to occur in schools, teacher education programs must
include EE in their curriculum. However, current literature shows that this is not happening.

Environmental education has yet to be institutionalized in preservice teacher education programs in the United States (McKeown, 2000). A study by McKeown (2000) revealed that one of the largest barriers teacher educators cited as to why EE was left out was limited course time conflicting with mandated course content. Heimlich et al. (2004) supports this with another study in which it was found that barriers to preservice EE instruction were mainly time, followed by EE not being a part of certification or endorsement requirements, EE not being mandated by the state, and EE not being an NCATE (National Council for Accreditation of Teacher Education) requirement. The policy-driven nature of preservice teacher education programs seems to be the greatest challenge of incorporating EE.

This lack of requirement for environmental education in any mandates or certifications seems to be at the core of why EE is not included in preservice teacher education programs. However, there is a vital need for preservice environmental education in university programs. Nelson (2010) shows that increased exposure to environmental education can increase the time that preservice teachers spend teaching about environmental topics. In his study, it was found that attending Project WILD workshops increased the time preservice teachers spent teaching about wildlife and the environment. Project WILD workshop attendance also improved preservice teachers attitudes toward ecology and knowledge of ecological topics. Although this study revealed the positive outcomes of preservice teachers attending an environmental
education workshop, the study cited previously by Heimlich et al (2004) shows that the “best fit” for incorporating environmental education into teacher preparation programs seems to be methods courses. This would also be the best way to ensure that all preservice teachers are exposed to environmental education.

Including environmental education in preservice teacher education will ensure that teachers and their students receive some degree of environmental education. However, this is only half the equation. The environmental education component of science education needs to include nature and environmental experiences. Nature experience is known to be important in producing citizens who are environmentally active (Tanner, 1980). A study by Wells and Lekies (2006) found that when children take part in “wild” nature through activities such as hiking, camping, or fishing, along with taking part in “domesticated” nature through activities such as picking flowers or caring for plants, they are more likely to have positive adult environmental attitudes. When children become engaged with nature at an early age, the experience is likely to stay with them and shape their future environmental path. Thompson et al. (2008) add to this idea with a study showing that frequent visits to green spaces as a child positively correlates strongly with adults being prepared to visit green spaces or woodlands as an adult and vice versa. The data also show that the emotional benefits of access to green space are strongly reflected in childhood experience. Another study found that adult environmentalists attribute their environmental interests or actions to having spent extensive time as children outdoors in natural areas, to family members such as parents,
to teachers or classes, involvement in environmental organizations, books, or the loss of a valued place (Chawla, 1999).

Many quantitative studies in environmental education report that environmental attitudes become more positive after exposure to some form of environment-related or environmental education (see review by Hart & Nolan). Qualitative studies in the area of environmental education have shown the importance of childhood experience in shaping environmental attitudes and behaviors. There is also an increasing number of studies about the lived experiences that might influence students’ environmental beliefs and behaviors (Hart & Nolan, 1999).

The studies cited above show the importance of students connecting to nature. But how are science teachers able to lead effective discussion and design appropriate environmental education lessons for their students if this is not a part of their preservice preparation? Are the majority of science teachers even aware of the importance of proper environmental education for future citizens? These questions reveal the current study’s importance in regards to science teacher education programs and what gets included in their curriculum.

The emphasis on policy and accountability in education seems to be a barrier keeping environmental education out of teacher training and the classroom. It is also a barrier to the inclusion of authentic nature experiences, which could be important in producing scientifically and ecologically minded citizens. However, a study that shows the importance of experience in the environment or with environmental education could impact these policies.
Although this research project directly informs research on the goals and practices of environmental education, it also informs science education research. Connections with scientific literacy, inquiry, and policy show the importance of this research. Bringing research on nature experience and connection into science education will create a richer dialogue for science education researchers and teachers.

**Conclusion**

The goals of environmental education call for the creation of environmentally active citizens who care for the environment and possess environmental sensitivity. The literature above reveals that experience and connection are important factors in environmentalism, but that gaps in the methodological and empirical literature fail to address the nature of these important elements. Furthermore, more discourse on the conceptions of environment, nature, and environmentalism is required in order for researchers and practitioners to determine whether or not environmental education is reaching its goals, and also whether or not these goals are appropriate.
CHAPTER III
METHODOLOGY

“Experience is enriched by reliving it, contemplating it, and trying to describe it to another person.”
~David Miller, *AWOL on the Appalachian Trail*

I offered a rationale for this research in Chapter I—seeking to form a deeper understanding of nature experiences, conceptions of nature, and the relationships between space, place, and identity. In Chapter II, I presented a review of the literature, which explored the history, goals, and research of environmental education, as well as significant life experience, nature experience, adult wilderness experiences, and connection to nature research. In this chapter, I describe the research design used to explore hikers’ lived experience of nature while thru-hiking the Appalachian Trail. In order to more deeply understand nature experience, connection to nature, and how space, place, and identity are interwoven, a qualitative research method was used.

Research Questions

According to Schram (2006), research questions are not the starting point of the design process, but rather the result of that interactive enterprise. Looking back and forth from big picture to particulars creates a conversation, out of which appropriate research questions emerge (Schram, 2006). The following research questions were developed in this way. The overarching goal of this study was to gain a deeper understanding of hikers’ lived experience during a prolonged nature experience. The specific purposes of this study were to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impact the actor’s place-making and in turn are impacted
by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an informal nature experience. The following specific research questions were explored:

1. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity, and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning, if any, takes place and how does it occur?

2. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?

3. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
   b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature, if at all?

In keeping with the open, emergent qualities of qualitative research, operational definitions will not be used. Carspecken (1996) argues that an operational definition takes a subjective term and turns it into an objective measurement. In order to support subjective-referenced research claims, face-to-face interviewing using sound interviewing techniques, in conjunction with observation in the field, was used. However, some
explanation of terms is appropriate for clarity and intellectual transparency. The term *experience*, as used in the research questions, is a generic term that encompasses a diverse range of personal meanings, connotations, and significances, such as dispositions, emotions, sensations, feelings, activities, actions, and events. Branching out from the generic term of experience, *experiential learning* refers to the process of making meaning from direct experience (Dewey, 1938, 1998). *Significant life experiences* refers to any experience, as defined above, that occurred previous to the present time and which the participant considers noteworthy, important, or momentous (Chawla, 1998). *Formative influences* encompass any person, place, or thing to which the participants credit their motivation, encouragement, or inspiration for behaviors, actions, choices, or characteristics of self (Chawla, 1998). *Reasoning* refers to reasons, motives, drives, or purposes that the participants cite for behaviors, actions, choices, or characteristics of self. The phrase *intense nature experience* is my own way of conceptualizing the experience of thru-hiking the Appalachian Trail. This definition reflects a personal assumption that the process and experience of thru-hiking the Appalachian Trail constitutes an experience that is by nature powerful and extreme due to the ruggedness, remoteness, and hardships of a long distance hike in a wilderness area. *Space, place, identity, and power* are tenets of critical geography (Soja, 1989), which will be used as the theoretical lens in this study. A *place* is defined as an area or location to which a participant has some sort of attachment, connection, or associated meaning (Katz, 1997). A *space* is defined as an area or location to which the participant has ascribed no meaning or connection (Katz, 1997). *Identity* is a term referring to one’s self, character, or
personality, and is unique and distinctive to each individual (Helfenbein, 2010). Power refers to control, influence, or impact between individuals, groups, places, organisms, or environments (Foucoult, 1980). Space, place, identity, and power will be discussed further in the theoretical framework. The term connect refers to a connection, attachment, bond, union, or interrelationship that a participant may have with any aspect of nature or the outdoors. Conception denotes an idea, notion, definition, meaning, description, classification, explanation, or characterization that a participant ascribes to a place or entity; in this case, nature. This terminology has been discussed in terms of my personal assumptions and the inherently constructed nature of words and their meanings. Due to the emergent and open nature of qualitative research and the unknowns of interactions with participants, data collection, and data analysis, it was necessary to revisit this terminology after data collection to ensure that it reflected participant meanings.

**Theoretical Lens**

To achieve a deeper understanding of hikers’ lived experience of thru-hiking the Appalachian Trail, a qualitative design informed by a critical geography lens was used. In qualitative research, a theoretical lens or perspective is often used to provide the researcher with a general orienting and positioning lens (Creswell, 2009).

Critical geography, as a lens for this study, helped bring together the constructs of space, place, and identity so that the relationships among them could be examined. This lens will be discussed in detail, since critical geography is not well known in environmental education or science education research. As hikers experience nature/the
outdoors on the AT, they will not only be practicing meaning-making but place-making as well. As participants experience the environment, the environment becomes a “place” that has specific meaning and context. It is this idea of space, place, and identity and the recursive and iterative relationship between them that necessitates a more overt discussion about these terms and ideas within environmental education (EE). Utilizing critical geography as a theoretical framework will allow this research to attend explicitly to space, place, and identity concepts, which are rooted in the lived experience of hikers.

The ideas of mapping, borders, and scale are central to geography as a field. Helfenbien (2010) explains that “bodies, positions, perception, lenses all come into play in this geography, this way of mapping and of making meaning of maps” (p. 304). Critical geography looks at “identities and difference, borders and borderlands, reproduction and resistance, the global and the local” (p. 305) in a holistic manner.

Emmanuel Kant’s philosophical exploration of the nature and role of geography had a significant influence on the development of that discipline. “Kant defines (physical) geography according to the ‘ordinary meaning’ of the term as ‘description of the earth’” (Burch, 1997, p. 21). Looking at the term in this way, physical geography “tells us where things are to be found, not as facts to be iterated, but as objects of the actual, integral world of our experience” (p. 22). The meaning ascribed to a thing comes from the thing being an object of experience and yet precedes the experience itself (Burch, 1997). Place-making, identity, and power relations all converge within this idea of recursive relationships and iterative concepts.
If geography is a field of “either, or,” then critical geography is a field of “yes, and” (Helfenbein, 2010). It is not enough to merely consider the spatial; in order to employ a critical geography, analysis of the evolution of space and how this impacts experience, power, and identity and is impacted itself by these same things, must be undertaken (Helfenbein & Taylor, 2009). Hall & Page (2006) clearly portray this idea in the following quote:

The value of wilderness is not static. The value of a resource alters over time in accordance with changes in the needs and attitudes of society . . . ideas of the values of primitive and wild land have shifted in relation to the changing perceptions of western culture. Nevertheless, the dynamic nature of the wilderness resource does not prevent an assessment of its values as they are seen in present-day society. Indeed, such an evaluation is essential to arguments as to why wilderness should be conserved. (p. 263)

This understanding demonstrates how the language of critical geography, specifically the distinction between space and place, is relevant in a study of lived experience and place-making. By speaking to the idea that people impart values upon different spaces and that these places have their own intrinsic value that shapes how people understand those spaces and themselves, Hall and Page illustrate an important component of critical geography as it can be applied to EE.

Helfenbein (2010) uses the concepts of space, place, power, and identity to explore the field of critical geography. These words are central to the language of critical geography. He explains that geographers have historically been concerned with the ideas
of space and place, and critical geography is therefore interested in the interrelationships of space, place, power, and identity. He elucidates that a place is a space that has been ascribed some meaning by those who dwell there and give it significance. Space becomes place through “discursive, interpretive, lived, and imagined practices” (p. 306).

Katz (1997) furthers the reciprocal relationship between space, place, and identity. He states that “the lived experience of . . . places not only colors my ideas but to some extent informs them” (p. 51). He attempts to explain how he makes meaning in a place while simultaneously expressing how he physically experiences a place.

Helfenbein and Taylor (2009) illuminate this idea further: “commonly noted as space imbued with meaning, place remains a fundamental concept in spatial analysis, yet the distinction between space and place is fluid in that space can no more be seen as neutral as any other social concept” (p. 237). The complexity in these terms is required in order to come to a realization of the ways in which spaces are created and also to recognize how these spaces work on those who dwell there (Helfenbein & Taylor, 2009).

Through descriptions of lectures given to groups of environmentalists, Pyle (2008) writes explicitly about the idea of place in environmental education. He “ask[s] [students] to imagine their special place of childhood – the spot you blame or bless for being here” (p. 157). This use of the phrase “special place” shows the embedded nature of ideas of space and place in environmental education. This also shows the need in environmental education for the language that critical geography provides so that we may delve deeply and critically into the environment as a place and investigate how it informs the self and the social reciprocally. In the quote above, Pyle also speaks to the idea of the
relationships between space, place, and identity—how each of these is formed and re-formed in relation to the others. This reciprocity seems to be just under the surface of environmental education research; through critical geography, we may begin to examine these intricacies.

The idea of power in critical geography is implicit and explicit to the ideas of space and place. Power simultaneously acts upon and acts within these constructs. Foucault (1980) brings to light the essence of power, which acts in expression of the relationships between places and between groups, but also possesses the ability to move fluidly from one point to another. Power influences those within a system (or place) to form an identity in response to a need to be able to navigate within that system. Place and identity become sites of power while at the same time becoming sites of resistance to power (Danaher, Schirato, & Webb, 2000). In terms of this study, power was examined through interviews, observations of hikers in nature, and observations of hikers interacting with others in nature. Power was revealed in this study through participants’ thoughts about who has authority or control over the Appalachian Trail and other nature spaces like it. There were also conversations about power in terms of how participants feel about environmental activism. For example, some participants felt powerless as one individual in a global environmental struggle; they may not have had a sense of ownership of environmental issues or possessed the action skills needed to be a participatory citizen. Conversations about power also moved into the non-human realm when discussing ideas about the “right” of nature to exist or the possible intrinsic value of nature.
In traditional geography, borders outline space and create place. However, in the new critical geography, borders are fluid, distressed, and part of the process of place-making and how meaning is made in places (Helfenbein, 2010). The explicit attention to scale is what distinguishes geography from most other areas of social science. Scale is naturally revealed through geographers’ preoccupation with place, space, and environment, and scale is the vehicle through which phenomena are studied (Hall & Page, 2006). Berg (2004) describes scale in critical geography as hierarchical spaces of knowledge production, stemming from the concept that some ideas are “attached” (p. 553) to the places where they were created, while other ideas can cross various borders. The author argues that through hegemonic Anglo-Americanism the scaling of knowledge literally and metaphorically “takes place” (p. 553). “Thinking about Anglo-American hegemony as a scalar politics provides us with a way of understanding how knowledge production can be implicated in scalar politics and therefore in the production of space” (p. 556). This idea of spaces and places and the relationships between them makes necessary the consideration of scale.

Foucault can also give us insight into the relationships between scale, borders, landscape, and orientation, although he does not use this same language. *Being* in a certain historical period will have fundamentally different modes of identity formation than the lived experience of any other period (Danaher, Schirato, & Webb, 2000), and this idea has definite underpinnings for the relationships between scale, borders, landscape, and orientation. Political events and power struggles are shaped by the
landscape in which they occur (Danaher, Schirato, & Webb, 2000), and influence how actors orient themselves in said landscapes.

The core critical geography concepts of space, place, power, and identity are directly applicable and deeply fundamental to curriculum studies, science education, and environmental education. The lens of critical geography reveals a reciprocal relationship between what people think about natural spaces and how those spaces shape people’s interpretation of them. This idea supports and enriches the current study. The ideas of place, meaning, and identity are all central to existing conversations about education, and critical geography lends a new language and new tools for dealing with spatiality in education. Conversations involving the social (such as curriculum) cannot be had without speaking to the spatial (Helfenbein, 2010). Helfenbien (2010) argues that Social structures can no more be understood without some conception of the spatial than can the spatial be analyzed without inclusion of the social (Soja, 1989). This is not to say that borders and boundaries create a sense of place in any pure of guaranteed way (again, see Hall, 1996), but rather of note is the notion that multiple possibilities exist within the bounded space and in the possibility of border crossing. It is precisely in this interaction that spaces speak, spaces leak, and spaces themselves are possibilities. (pp. 308-309) 

EE curriculum, science education curriculum, and any other type of curriculum are not only a social endeavor but a spatial one as well. The ideas of bounded space and border crossing are particularly relevant to the social and spatial aspects of curriculum conversations.
Utilizing critical geography as a form of inquiry and theoretical framework allowed this study to attend explicitly to space, place, and identity—concepts naturally embedded within EE and outdoor experiences. Many of the design decisions for this study were informed by critical geography. The research questions reflect the theoretical framework of critical geography by utilizing the terms space, place, identity, and power. By recruiting participants at the beginning, middle, and end points of the trail, relationships between space, place, and identity began to be revealed. Observation of participants as well as interviews helped to uncover how place-making occurs over time, and how this act of place-making is influenced by one’s identity and vice versa. Many of the interview questions were designed specifically to reveal place, meaning, and identity. For example: did you feel a connection to the AT before you began your hike? Has this changed since you have been hiking? These questions attempt to reveal how the participant had been place-making, which will allow a conversation about how place becomes.

This theoretical framework was also used during analysis as a lens through which the data were examined. I sought to use a critical lens to help break down constructions of places and borders. Nature is often seen as a separate place from where humans are located, a place people can visit and leave. My goal was to look beyond this bordered idea of nature by troubling these constructions of space, place, power, and identity and beginning to see the complexity of how space becomes place and how places become bordered. This study was also concerned with how people orient themselves in different spaces. For example, how do people see themselves in relation to nature spaces? Are
they a part of nature or apart from nature? Can they go to nature as a place or are they already there because they are a living thing? Critical geography gave me the language and the tools I needed to navigate these types of questions in a critical way.

**Design**

The purpose of this qualitative study was to gain a deeper understanding of hikers’ lived experience of nature while thru-hiking the Appalachian Trail. A naturalistic inquiry (Lincoln & Guba, 1985), which relies on interviews as a principal source of data collection, was used. The study was informed by a critical geography lens, as described in the theoretical framework. The study was also informed by literature of early and foundational interpretive work, including ethnographic scholarship, as much of the early interpretive work came out of this area (Denzin & Lincoln, 2000). I do not see ethnographic work and interpretive work as separate entities, rather I see interpretive work as growing out of and based in early ethnographic work. My role as a researcher, the types of research questions I asked, and my fieldwork all borrowed from interpretive ethnographic works.

Frederick Erickson’s (1986) piece on qualitative methods was the first of its kind in *The Handbook of Research on Teaching*. No one had spoken previously in this venue on interpretive research and the kinds of questions that it could answer. These are the kinds of questions that were investigated in the current study, which is why an interpretive method was chosen. Erickson (1986) uses the word *interpretive* to mean the entire set of methodologies using participant observational research, not only ethnography, which is the methodology from which much interpretive work arose. In
reference to the kinds of questions interpretive research can answer, Erickson lists four categories:

1. The specific structure of occurrences rather than their general character and overall distribution . . . What is happening in a particular place rather than across a number of places?

2. The meaning-perspectives of the particular actors in the particular event . . .

3. The location of naturally occurring points of contrast that can be observed as natural experiments when we are unable logistically or ethically to meet experimental conditions of consistency of intervention and of control over other influences on the setting . . .

4. The identification of specific causal linkages that were not identified by experimental methods, and the development of new theories about causes and other influences on the patterns that are identified in survey data or experiments (p. 121).

The questions of lived experience that this study grapples with are the types of questions to which Erickson (1986) was referring. The research questions attempted to get at what Erickson calls the “invisibility of everyday life” (p. 121). Geertz (1973) also alludes to this idea of looking for the extraordinary in the ordinary in *Notes on a Balinese Cockfight*, when he describes that “the cockfight has barely been noticed, although as a popular obsession of consuming power it is at least a revelation of what being a Balinese ‘is really like’ as these [mythology, art, ritual, etc.] more celebrated phenomena” (p. 417).
I wished to bring out the “invisibility of everyday life” by examining the lived nature experience of thru-hikers.

Merriam (2002) states that a basic interpretive approach embodies the key characteristics of qualitative research. Although Merriam uses the term “basic interpretive,” I have chosen to use the term “naturalistic inquiry” in the context of this research. There are four major characteristics of qualitative research, the first being the idea of the researcher wanting to understand the meaning that participants have about a phenomenon and how they experience it. Secondly, the researcher is the primary instrument for data collection. Thirdly, the process is inductive rather than deductive, and finally, words and rich description are used instead of numbers to convey the results (Merriam, 2002). A qualitative research approach lent itself well to the purpose of my study because it enabled me to look at “how people interpret their experiences,” and also to discern “what meaning they attribute to their experiences” (Merriam, 2002; p. 38). Using this approach allowed for the creation of rich, descriptive text and assisted in the discovery and understanding of hikers’ experience in, and connection to, nature.

The selection of a research strategy orient a researcher towards a set of skills, assumptions, and practices that allow movement from paradigms to the empirical world (Denzin & Lincoln, 2000). “Strategies of inquiry put paradigms of interpretation into motion” (p. 22), as well as direct the researcher to specific methods of collecting and analyzing data (Denzin & Lincoln, 2000). This study employed naturalistic inquiry as the specific qualitative strategy of inquiry. Naturalistic inquiry is not as prescriptive as other approaches, such as grounded theory, and naturalistic methods are nearly
synonymous with qualitative research in general (Hatch, 2002). Nevertheless, Hatch (2002) recommends that those claiming a naturalistic inquiry approach address the procedures and methods of Lincoln and Guba’s (1985) foundational work.

Lincoln and Guba (1985) explain that naturalistic studies are very difficult to definitively design before the study is undertaken, although there is a characteristic pattern that may aid in planning. Naturalistic inquiry must be performed in a natural setting through a human instrument. The human instrument allows for tacit knowledge to be attended to, instead of just formal knowledge. The research methods employed should be qualitative in nature, such as interviewing, observing, document mining, and interpretation. Sampling should be purposive in nature and usually attempts to include as much information and variation as possible. Sampling is emergent in design and cannot be drawn in advance. Sampling, as well as data collection and analysis, will be discussed in more depth in the sections for which these topics are germane.

A challenge of this study came in eliminated inappropriate methods of inquiry. Although a large element of the proposed study is lived experience, phenomenological research methods were not employed. Phenomenology might have been an appropriate method for the study. However, I did not philosophically agree with many tenets of phenomenology. Phenomenology seeks to discover what a particular phenomenon means and how it is experienced (van Manen, 1990). Phenomenology is not only a research method, but a school of philosophy. Phenomenological studies are based on the assumption that shared experiences possess an essence, or core meaning. It is also necessary for phenomenological researchers to attempt to bracket, or set aside, prior
beliefs about the phenomenon (Merriam, 2009). While this idea is contested in the literature, it is still considered an important element of phenomenology (Smith, Flowers, & Larkin, 2009). I felt uncomfortable with the assumption that shared experiences have an essence. Bracketing is also a problematic concept. I did not see bracketing as realistically possible in this study, and would also argue that being aware of prior beliefs and assumptions requires explicit negotiation between one’s own beliefs and the product of the inquiry. It is the responsibility of an ethical researcher to communicate possible biases and assumptions to the reader.

A second reason that phenomenological methods were not a good fit for the current study is that not all research questions were phenomenological in nature. The questions focusing on connections, learning, and formative influences could very well be connected to experience and be seen and answered through a phenomenological lens, however, I did not want to pre-determine the findings of these questions to be experience-based. I hope to allow the findings to emerge in their own manner into whatever form and direction is rooted in the data.

**Setting**

The interviews and observations for this study took place on portions of the Appalachian Natural Scenic Trail, more commonly called the Appalachian Trail, or the AT (Ray, 2009). The Appalachian Trail is a public footpath that traverses 2,184 miles (NPS, 2012) and has 250,000 acres of public land associated with it (ATC, 2012). Figure 5 shows the location of the Appalachian Trail and the path it traverses from Georgia to Maine.
The trail was conceived in 1921 and completed in 1937 (NPS, 2012). Benton McKaye, a Harvard graduate and former U.S. Forest Service employee, proposed the Appalachian Trail as a tool for responsible land and wildlife management, as well as an escape for those from urban areas of the East Coast. The trail goes from Springer Mountain in Georgia through North Carolina, Tennessee, Virginia, West Virginia, Maryland, Pennsylvania, New Jersey, New York, Connecticut, Massachusetts, Vermont, and New Hampshire to Katahdin in Maine. The trail encompasses many ecosystems and towns, goes through six national parks, and has elevations ranging from 124 to 6,625 feet above sea level (Ray, 2009). The range of ecosystems and “varieties” of nature made the
Appalachian Trail a good location to explore how people experience, connect to, and conceive of nature. In addition, there are places on the AT that go directly through a town, making it a semi-remote nature area. In order to reach the AT it is usually necessary to hike in on a connecting trail. This allowed me to observe hikers in a relatively “natural” space as well as make observations of hikers when they hike into towns to resupply their food and service their gear. These different observations will aid in showing how hikers relate to spaces that are more or less “natural.”

Participants consisted of Appalachian Trail thru-hikers. Long distance hikes can be days, weeks, or months, but are defined by necessitating complex logistics (Ray, 2009). A hiker or backpacker who has completed or is attempting to walk the entire Appalachian Trail in one uninterrupted journey is considered a thru-hiker (ATC, 2012). The participants for the study were recruited on site and a diverse population was sought out. For this study, no one was excluded based on race, age, or gender, however, I wanted to recruit a diversity of participants in terms of both reasoning for hiking the trail and demographics. The rationale for this type of recruitment was to attempt to garner a variable assortment of participants who encompassed a diverse set of hiker personalities (Lincoln & Guba, 1985). Long distance hikers on the AT come from many different backgrounds and choose to hike for myriad reasons. Extreme athletes, recent high school or college graduates, people with career burn-out, those with midlife crises, evacuees of failed relationships, and retirees are among some of the groups that choose to hike the AT. What these hikers share is the choice to undertake a brutal, intense outdoor experience that involves rough terrain and inclement weather (Ray, 2009). As I wanted
to understand the diversity of nature experience and connection to the outdoors, a
diversity of participants was desirable, in so far as it was possible under the
circumstances of reality. As Lincoln and Guba (1985) argue, this increased the range and
possibility of data uncovered, and exposed multiple realities. It is for this reason that
participants were not pre-selected from hiking groups, such as the Sierra Club, as
participants in these groups most likely share commonalities such as being pro-
environmental. Potential participants were approached by the researcher at multiple
intervals during the study. Recruitment occurred three times, with the first being in or
near Damascus, VA, as well as at the Trail Days Festival in Damascus, toward the
beginning of the hiking season in April 2013. Figure 6 shows the location of the first
recruitment and data collection. The second recruitment took place in the middle of the
hiking season in June in Harpers Ferry, West Virginia, which is considered the
psychological halfway point of the trail (Ray, 2009). Figure 7 shows the location of the
second recruitment and data collection. The third time took place at the conclusion of the
hiking season in September, in Monson, Maine, which is the last resupply point for hikers
before they enter the 100 Mile Wilderness, at the end of which is the summit of Mt.
Katahdin and the completion of northbound thru-hikes. Figure 8 shows the location of
the third recruitment and data collection.
Figure 6. Area of First Data Collection

Figure 7. Area of Second Data Collection
Each recruitment event resulted in a new set of participants. Due to the “off the grid” nature of hiking, it was not possible to meet up with the same hikers at different points along the trail. Recruiting new participants at each point allowed me to compare and contrast their place-making, connection to nature, and experiences based on how far they had hiked up to that point, as well as providing enough participants to have a depth of data. Recruiting at these three points also enabled me to attend to my research questions and research purpose. Because place is defined as a space that is imbued with meaning by a person who has experienced it (Katz, 1997), someone who has spent more time hiking and has had more experiences with/in a place might have a stronger connection to that space as place, or they might have different conceptions of how that place is bordered, or orient themselves differently in that space. Another reason for
utilizing these three points is to examine how connection to nature and conception of nature might be different based on how long a person has spent being with nature.

The total number of participants was 18. Eight participants were recruited during the first recruitment event, six during the second, and four during the third recruitment event. I recruited participants by asking hikers I met if they would like to participate in an interview for a research study. Specific details on the recruitment of each individual participant are given in Chapter IV. The official recruitment script is included as Appendix A. I did not require that participants provide any demographic information about themselves. However, most participants filled out this optional piece of the consent form, or mentioned their age during the interview. Reporting of ethnicity was also completely voluntary and participants identified themselves however they wanted to. Participants were mostly Caucasian; only 3 participants identified as non-white. This is not surprising as there are not many minorities that thru-hike the Appalachian Trail. Two of my participants were from Switzerland and had travelled to the U.S. for the sole purpose of hiking the Appalachian Trail. I interviewed 11 men and 7 women. This is reflective of the fact that there are more men that thru-hike the AT than women. One participant self-identified as gay, one participant self-identified as Christian, and one participant self-identified as Catholic. The ages of participants ranged from 21 to 65 years of age.

**Data Collection Methods**

In qualitative research, the researcher is the instrument through which data is collected (Lincoln & Guba, 1985, Merriam, 2005). Denzin and Lincoln (2000) wrote:
Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. (p. 3)

Study of these empirical materials helps the researcher understand moments and meanings of participants’ lives. Through this act, the researcher can be considered a “bricoleur” (p. 4), a maker of quilts; the use of multiple methods, or triangulation, seeks to ensure an in-depth understanding. Although we can only know an entity through its representations, and objective reality is not possible, the use of multiple methods adds rigor, richness, and depth to qualitative inquiry. To achieve this depth of understanding, multiple data collection methods were used and analyzed to describe hikers’ experiences of the outdoors and their connection to nature.

In accordance with the recommendations of Lincoln & Guba (1985), the methods of data collection employed in the study were semi-structured, open-ended interviews, field observation and field notes, memos, and a researcher journal. Prior to any data collection, the study was approved by the Institutional Review Board (IRB) of the university and the participants signed a consent form allowing their data to be used for research and publication. All of the interviews were audio taped, and the audio was then transcribed by a third party. Field notes and memos were used as formal data collection during observations, although some observation periods were audiotaped as spontaneous
follow-up interviews. For a summary of the data collection design, please see Figure 9 at the end of this section.

**Participant Observation**

According to Schram (2006), fieldwork must have an intent in order to be valuable. In naturalistic inquiry, research should be carried out in the natural setting or context of the object being studied “because naturalistic ontology suggests that realities are wholes that cannot be understood in isolation from their contexts, nor can they be fragmented for separate study of the parts (the whole is more than the sum of the parts)” (Lincoln & Guba, 1985, p. 39). One data collection method that was used during this study was participant observation. Although interviews allow movement back and forth from the past to the present, observation “provides here-and-now experience in depth” (Lincoln & Guba, 1985, p. 273). During the hiking season, the researcher undertook three separate hiking/data-collection trips to various parts of the Appalachian Trail, which coincided with each period of participant recruitment as outlined above. During each of these periods participant observation of the act of hiking was attempted. Only the first two data collection periods included this participant observation. During all data collection periods, observation of the hiker community in general took place. These observational periods allowed the researcher to invest sufficient time to learn the culture of the hikers and to build trust with some of the participants (Lincoln & Guba, 1985). There is a tension between being a participant and being an observer within most types of qualitative fieldwork (Hatch, 2002). This tension will be described in further detail in the section on the role of the researcher.
The purpose of this fieldwork was two-fold. First, these hiking/observation periods allowed the researcher to observe hikers’ experiences in context as they were occurring. Second, this prolonged engagement in the field was important in building trust with the participants, which supported the interview process (Lincoln & Guba, 1985). As I spent time engaging in and with the hiker community, I became familiar with the culture of the community. My presence in the community also allowed possible participants to see me as more of a part of the community. Some hikers had known about me before I even met them. This would occur when someone I had talked with or interviewed would tell other people about their experiences with me. Some participants saw me as a community member that they wanted to assist and would send other hikers to me to be interviewed. I talk more about the community aspect of the Appalachian Trail in Chapter IV.

Observing the participants as hikers and in their interactions with nature and one another informed some of the interview questions and allowed me to use probing questions more effectively. For example, through my experience of hiking parts of the trail, planning for my own hike, and observing the hiking community, I learned that a permit is necessary to hike through certain portions of the trail. I could then ask participants how being required to buy these permits made them feel. This allowed me to gain insight into the participant’s thoughts and ideas about who has power over the trail and its environments. The goal of participant observation in this study was to understand the phenomena of nature experience, nature connection, place-making, and experiential learning from the perspectives of the participant (Hatch, 2002). Although the
observations were more informal (Merriam, 2009) and limited in nature, I attempted to be cognizant of certain things during my observations. Merriam (2009) suggests a checklist of elements to look for during observation: (a) the physical setting, which includes elements such as environment, context, space, objects, and the kinds of behavior the setting is designed for; (b) the participants—who, how many, what roles are played, why these people are together, who is expected to be present, characteristics, organization, and patterns of interaction; (c) activities and interactions, in terms of what is happening, sequences of events, interactions with and during activities, connections to activities, norms, rules, and duration; (d) conversation, in terms of content, speaking and listening roles, silences, and nonverbal behaviors; (e) subtle factors, such as informal or unplanned activities, symbolism/connotation of language, dress, and what is not happening; and (f) your own behavior, in terms of researcher role, conversation, behavior, and how the researcher is a part of the setting (Merriam, 2009, pp. 120-121). These elements were utilized as much as possible during observations, with special attention being paid to elements 1, 2, 3, and 5 as these were particularly germane to the current study.

During observation, data was collected by taking field notes in order to record observations and analyze the participants’ experiences (Emerson, Fretz, & Shaw, 2011). Field notes were either written in my research journal or recorded on a digital voice recorder. Due to the physical nature of hiking, it was not always be possible to write all field notes as they occurred. This is why the voice recorder was utilized in taking field notes, along with jotting down notes during rest periods and meal times. These raw field notes were converted to research protocols (Hatch, 2002). Hatch (2002) defines research
protocols as “filled-in field notes organized in a consistent format in preparation for analysis” (p. 77). The process of creating research protocols from raw field notes involved creating a more complete description based on the raw notes and memory. This was done as soon as possible after completing an observational episode (Hatch, 2002). In order to do this, I attempted to fill in my field notes each evening and also write more formal and complete research protocols when I returned from the trail after each data collection period.

**Interviewing**

An interview is a purposeful conversation. Lincoln and Guba (1985) write that interviews help researchers to gain “here and now constructions” (p. 268) of events and feelings as experienced in the past. Since the researcher was interested in understanding hikers’ lived experience of the outdoors, connection to nature, and the significant life experiences (SLEs) or reasons why people chose to hike the AT, interviews were used as a main data collection method. “A major advantage of the interview is that it permits the respondent to move back and forth in time – to reconstruct the past, interpret the present, and predict the future” (Lincoln & Guba, 1985, p. 273). Three rounds of semi-structured interviews corresponding to the three different groups of participants were completed. These three rounds of interviews were referred to as interview set one. In my plan for data-collection, there was then a follow-up interview with all participants from each recruitment episode once the hiking season had ended and the participants had time to reflect on their experiences and settle back to their non-hiking lives. However, follow-up interviews with all participants were attempted but not successful. I was able to make
contact with only one participant. The follow-up interview was referred to as interview set two. As stated earlier, it would be nearly impossible to follow the same people at different points of the trail since there is no way to contact people as they hike. This necessitated that three different groups of hikers be recruited at each point of data collection. The follow-up interview was intended to help ameliorate the issue of not being able to follow the same group of hikers through their entire hiking experience. The inability to make contact with participants for follow-up interviews will be discussed in more depth in Chapter V.

Each of the interviews were conversational (Bogdan & Biklen, 1998), evolving, and made use of a semi-structured format which allowed the researcher to ask more probing questions (Rubin & Rubin, 2005). The majority of the interview questions avoided yes/no answers in order to collect rich, detailed stories. The interviews were designed as what Rubin and Rubin (2005) term “structured conversations” (p. 129). The interviews were organized around a specific pre-determined set of initial questions. The semi-structured format of the interviews permitted me to clarify the conversation through the use of follow-up questions and probes (Rubin & Rubin, 2005). The interview questions encompassed 5 main subjects: (a) background; (b) significant life experiences, formative influences, and reasoning for hiking the AT; (c) expectations, experiences, and learning; (d) connections to and conceptions of nature; and (e) space, place, identity, and power. Including these 5 sections in each interview helped to triangulate this data source. The conversations had during each section of the interview allowed participants to talk about ideas germane to the research questions from different angles. This provided data
that supported emergent themes and created rich, thick descriptions. Interview set 1, all three rounds, took place in the field on the Appalachian Trail. These interviews took approximately one to two total hours each. Interview set two, the follow-up interview with one participant, took place out of the field through email. The full research protocol and list of questions for each set of interviews is included as Appendix B.

The first round of interviews took near the beginning of the AT hiking season in April of 2013 and was geographically located within the first 500 miles (out of 2185.9 total miles) of the AT beginning in Georgia, or northbound. Most thru-hikers start their trips in early March or April at Springer Mountain in Georgia and finish at Katahdin in September. Roughly 1,500 northbound hikers start out each year from this point (ATC, 2012). Beginning my data collection at this geographic and temporal point allowed me to come into contact with the most possible participants. This increased the likelihood of recruiting a diverse set of participants. The second round of interviews took place at the midpoint of the trail near Harpers Ferry, West Virginia, in mid-June of 2013. Harpers Ferry is considered the psychological midpoint of the trail (Ray, 2009) and is situated at mile 1013.4 out of 2185.9 total miles. The third set of interviews happened near the northern end of the trail in Monson, Maine, in early September of 2013. Monson is the last resupply point for northbound hikers before entering the 100 Mile Wilderness and summiting Katahdin, and lies at mile 2071.4 out of 2185.9 total miles. Collecting data at the beginning, midpoint, and end of the trail allowed me to look at how place-making, experience, and connection to nature might be different at different points in time and space. Hikers’ lived experience from each group was not compared and contrasted;
rather the aspects of place-making, connections to nature, and conceptions of nature were examined across groups.

The purpose of these interviews was to ascertain hikers’ experiences, connections to nature and the outdoors, learning experiences, significant life experiences, and reasoning for hiking the AT. Although the same people were not interviewed during successive interview rounds, I attempted to bring out how people thought their identities, place-making, connections, and expectations had changed over time depending on how long they had hiked. For example, a hiker in the middle of the trail had different expectations than when they began their hike, and vice versa. The evolution of hikers’ experiences aided in revealing the iterative and recursive relationships between space, place, and identity, along with providing a deeper understanding of the lived experience of nature on the trail.

**Memos and Journaling**

Throughout the project, memos and a research journal were used as a way to document the researcher’s experiences, thoughts, and questions that emerged during the research experience. According to Schram (2006), this allows a researcher to be reflexive by being concurrently aware of “self and other,” which is a main feature of qualitative methodology (p. 9). Memos are a way to keep track of the researcher’s thoughts, speculations, and intuitions as they prepare for analysis. The information captured in memos is in actuality undeveloped analysis, and is useful in moving back and forth from raw data to emerging analysis (Merriam, 2009). Memos were created during each phase of data collection and analysis.
A research journal was also maintained throughout the study. The purpose of the research journal was to record the personal aspect of the research experiences, participatory experiences, ideas, mistakes, confusions, problems, and breakthroughs. This provided a way to contemplate biases, assumptions, and feelings, as well as offer an avenue for open reflection (Hatch, 2002). A second purpose of the research journal was to act as a personal experience narrative (Denzin, 1989). Following the style of an autoethnographic text, the research journal exhibited “multiple layers of consciousness . . . focusing outward on social and cultural aspects of . . . personal experience; then . . . look[ing] inward, exposing a vulnerable self that is moved by and may move through, refract, and resist cultural interpretations” (Ellis & Bochner, 2000). This allowed me to be more reflexive in writing about my own experience as a participant observer, and to navigate tensions between being a participant and being an observer.

The research journal was used in a number of ways. It was a place for me to document field notes and create field protocols (Hatch, 2002). The journal was used as a data source in that it documented my own personal hiking experiences and thoughts. Arguably, the most important purpose of the research journal was to aid and guide data analysis. Excerpts from my research journal are provided in Chapter V, italicized to differentiate them from the remainder of the text and my final analysis. The journal also provided documentation of my thoughts as a researcher as the research was planned and carried out. This “conversation” was invaluable in analysis and discussion of the findings. A written account from my research journal on the changes that emerged in the study design is provided in Chapter V. Without a written record, or audit trail, of exactly
what transpired throughout the research it would have been difficult to provide rich, thick
description and be as transparent in my writing as possible.

**Figure 9.** Summary of Data Collection

As discussed, the data collection occurred while I was in the field, hiking the
Appalachian Trail as a participant observer, and there was different data collected at
different times. For a summary of this information, please see Figure 10.
Lincoln and Guba (1985) wrote about the criteria for trustworthiness that naturalist inquirers must strive to meet. The four criteria they put forth were credibility, transferability, dependability, and confirmability. Credibility is gained by “carry[ing] out the inquiry in such a way that the probability that the findings will be found to be credible is enhanced, and second, by having them [the findings] approved by the constructors of the multiple realities being studied” (p. 296). A researcher may increase the credible nature of a study through prolonged engagement in the field, triangulation, peer debriefing, and member checks (Lincoln & Guba, 1985). Prolonged engagement for this study was maintained through sustained time in the field and observation, thereby building trust with the participants and AT community. A total of three weeks were spent observing in the field. Triangulation was achieved through “using multiple sources of data collection methods” (Merriam, 2002, p. 31) in the form of interviews, observation, memos, and journaling. The interviews themselves were also triangulated by including
five sections in each interview, which allowed me to get at participants’ ideas from multiple angles.

Peer debriefing occurred in September and October of 2014 at a dissertation study group that consisted of three other doctoral candidates who met twice to confirm or challenge emergent themes and ideas. The peer debrief group consisted of myself, two female science education doctoral candidates, and one male social studies education doctoral candidate. The members of the peer debrief group were provided with an instructional document that included the research questions and study purpose, as well as a short explanation of terminology. This document is included as Appendix E. Group members all received a different transcript, for three transcripts total. Group members were then instructed to read and code their transcript with special attention to any codes that supported the research purpose and questions. After this initial coding exercise, we met as a group to discuss codes that had emerged for each member of the group. The codes, themes, and ideas generated by this initial coding exercise supported my own initial codes. I then gave each group member a second copy of the initial transcript that they coded, this time with some of my personal coding and memos written on the transcript. Group members then re-read the transcript in order to confirm or challenge my coding notes and memos. After this second reading, we met again as a group to discuss. This process of peer debriefing resulted in some codes, themes, or ideas becoming more fleshed out and defined. No codes, themes, or ideas were thrown out as a result of this process.
Member-checking occurred during the follow-up interview with one participant. I member-checked by “taking data and tentative interpretations back to the [person] from whom they were derived and asking if they were plausible” (Merriam, 2002, p. 31). Since the participant was not a researcher, this was done in a sensitive way so that he understood what was being communicated. Follow-up interviews were attempted with all participants, however due to the transient nature of thru-hikers, I was only able to successfully contact two participants, only one of whom returned answers to the email follow-up interview. This is discussed further in chapter IV and chapter V. Although this set-back influenced some areas of the study, I was able to member-check during the initial interviews with all the participants. I did this by using probes, follow-up questions, and by repeating my interpretation of what participants were saying back to them to ensure that I was not extrapolating incorrectly.

Transferability (Lincoln & Guba, 1985) was maintained through providing rich descriptions of the setting, data collection, analysis, and findings. The setting of the Appalachian Trail is a unique research site, but it offered a rich site to understand how different people experience the outdoors and what it means to connect to nature. According to Lincoln and Guba (1985), the person seeking to make the application to a new setting has the responsibility of transfer or generalizability. As only the researcher is familiar with the research setting, their responsibility is to provide a rich description of the setting in order for another person to make a judgment about whether another setting is similar enough to transfer findings (Lincoln & Guba, 1985).
Dependability requires the researcher to realize two groups of factors, those of instability and those of phenomenally or design induced change (Lincoln & Guba, 1985). Lincoln and Guba remind us that there can be no credibility without dependability, and although this argument has merit, it is also weak. Therefore, in the present study, dependability will be garnered not only by using triangulation, which can be used to establish credibility through dependability, but also by the use of an inquiry audit. An inquiry audit, performed by the dissertation committee naturally through the dissertation process, examined and attested to the process, acceptability, and dependability of the inquiry (Lincoln & Guba, 1985).

Confirmability is realized partially by the last phase of the inquiry audit, outlined above, which is the confirmability audit. This is an examination of the findings in order to attest that they are indeed supported by data and internally coherent. In order for this to be possible, a “residue of records” (Lincoln & Guba, 1985, p. 319), or audit trail, was kept. The audit trail for this study consisted of raw data, including recorded materials and field notes; data reduction and analysis products, including theoretical notes and field note write-ups (earlier defined as research protocols (Hatch, 2002)); data reconstruction and synthesis products, such as themes, findings, and conclusions; process notes, including methodological notes and trustworthiness notes; materials relating to intentions and dispositions, such as personal notes and expectations; and instrument development information, such as observation formats and interview protocols (Lincoln & Guba, 1985, pp. 319-320). The keeping of a reflexive research journal also aided in achieving confirmability and in the creation of an audit trail (Lincoln & Guba, 1985).
In order to work toward the study being ethical in nature, the researcher completed the CITI course and submitted an IRB application, which was approved by the Kent State University Internal Review Board. Informed consent was used for all data sources. This gave each participant an idea of the study’s purpose, procedures, benefits/risks, privacy/confidentiality, and voluntary participation status. This informed consent form is provided as Appendix C. The participants were not made to be uncomfortable beyond what is expected in everyday life and confidentiality was maintained throughout the study. All write-ups and presentations of this research will use a pseudonym for the protection of the participants’ identities.

Assumptions

Researchers are not value-free, blank slates. Although the positivist paradigm asserts that research is value-free in that it is free from assumptions, perspectives, culture, individual norms, and a host of other value-related factors, Lincoln & Guba (1985) remind us that the naturalistic paradigm holds that research is, in fact, value-bound, and is influenced by the researcher’s assumptions, values, and beliefs. Because researchers are indeed human and cannot, therefore, be value-free, it is imperative that the researcher recognize and take explicit account of his or her own values and assumptions (Lincoln & Guba, 1985). Merriam (2009) asserts that critical self-reflection of one’s own position and assumptions and how these relate to and may affect the study is one strategy for promoting not only a valid and reliable study, but also an ethical one.

A concept from phenomenology, bracketing, “in its conceptual form, means holding a phenomenon up for inspection while suspending presuppositions and avoiding
interpretations” (Hatch, 2002, p.86). In researching lived experience through phenomenological methods, bracketing requires that everything except the research focus be set aside, so that the entire research process is rooted only in the topic and question (Moustakas, 1994). Van Manen (1990) claims that in phenomenological inquiry, assumptions can “predispose us to interpret the nature of the phenomenon before we have even come to grips with the significance of the phenomenological question” (p. 46). Therefore, phenomenological researchers are particularly sensitive to bracketing, while other research traditions see the need to be aware of assumptions and biases, but not to set them aside (Hatch, 2002).

As this study is a naturalistic inquiry and not a phenomenological study, the researcher took a place on the continuum of bracketing somewhere in between being aware of assumptions and placing the phenomenon outside of one’s knowledge. I believed that assumptions are important and must be brought out, but that they must be dealt with, not bracketed away. In the spirit of this stance, I had previously engaged in a collaborative qualitative study for the purpose of bringing my experiences and assumptions to the foreground (Klein & Schneider, 2012). The research pair investigated their own connections to nature and sensuous experiences of nature while walking in outdoor, nature-based spaces. Data collection methods included photographic documentation, artistic renderings, item collecting, written reflections, journaling, walking, and collaborative reflection/debriefing. The purpose of the study was to individually and collaboratively explore how two people experience and make sense of nature-based spaces. The research utilized an emergent, basic interpretive design.
Findings suggested that experience in nature was sensual, social, and spatial.

Researchers interacted with the outdoors in a sensual manner. Interaction, connection, experiences, and expectations were different based on whether the researchers had been to a location before, and also on whether they walked together or separately (Klein & Schneider, 2012). I brought these personal experiences and assumptions about the lived experience of nature out without attempting to force these elements onto the participants.

There are a number of other assumptions that have been made in planning and carrying out this study. My first assumption is that the Appalachian Trail is a nature space. Although the AT is natural area, it is managed by people, has man-made structures throughout the space, is bordered by populated areas, and is utilized by thousands of hikers. Although this is a different type of space than one that is more remote and unmanaged, I am still considering it a nature space. It has many natural elements such as flora, fauna, vistas, and physical features such as streams and mountains. There were, however, participants who saw the Appalachian Trail as not being wholly a nature space. Another assumption that I made is that an Appalachian Trail thru-hiker is seeking a nature experience in some fashion. There are many different reasons someone might wish to hike the AT, such as wanting a challenge, being athletic, or seeking refuge from grief or hardship. What AT hikers have in common is that they have all chosen to embark on an extreme, powerful outdoor experience that includes irregular topography and ever-changing weather (Ray, 2009). It is this commonality that led me to believe that the choice to undertake this experience indicates a person’s wish to engage with nature or the outdoors in some way. For example, someone who chooses to
hike the trail as a personal challenge could have chosen any number of non-nature experiences such as getting a higher degree, learning a new language, training for a marathon, or any number of things. The choice to partake in a nature/outdoor experience as a personal challenge indicates a choice to be with nature. There was only one participant who did not see his thru-hike as a nature experience.

**Role of the Researcher**

The role of the researcher in interpretive studies comes down to two divergent words that have come together through qualitative research to create a continuum: participant observer (Merriam, 2002). Page (1991) talks about participant observation as a data gathering strategy; Erickson (1986) speaks about participant observational research as an entire family of qualitative approaches; and finally Agar (1996) writes about the idea of an ethnographic researcher having the dual role of both participant and observer. In order to look at the role of the researcher in this way, one must also look at the role of the participant. Agar really speaks to this when he asks “where was the ethnographer? Wasn’t he or she part of the story as well? Data didn’t just fall out of the sky. It was actively constructed over time in a collaborative way” (p. 4). This idea of collaboration is what being a participant observer meant in terms of this study. Agar goes on to describe the role of the researcher in context of the role of participants. Just as what we call our “participants” matters in the realm of power, it also matters in how the researcher sees their own role.

Geertz (1973) in his *Notes on the Balinese Cockfight* and Rosaldo (1993) in his *Grief and a Headhunter’s Rage* each take a different stance on the role of the researcher.
It would seem that Geertz almost believes in the idea of “going native,” while Rosaldo attempts to clarify the difference between immersion/acceptance in a culture and actually becoming one with the culture. Rosaldo also attempts to go against thick description in an effort to illustrate the power of an emotion. He “question[s] the common anthropological assumption that the greatest human import resides in the densest forest of symbols and that analytical detail, or ‘cultural depth,’ equals enhanced explanation of a culture . . .” (p. 2). Rosaldo warns against the idea of an ethnographer being prepared and knowledgeable enough that an “authoritative claim” can be made about the interpretation of data (p. 8). He brings the idea of reflexivity to the ethnographic table, along with the iterative nature of ideas. He talks about the ethnographer as a “positioned subject” who sees phenomena through a specific and personalized lens, and discusses how this lens or “position” can both facilitate and hamper different kinds of insight (p. 19).

For myself, the scholar who gets to the central idea of the role of the researcher is Ruth Behar. In Behar’s (1996) *The Vulnerable Observer*, the friction between being a participant and being an observer comes to light. She speaks about getting the “native point of view” without “going native” (p. 5). The question of the researcher’s role can no longer be answered; it is instead the researcher’s responsibility to choose a place along a continuum between the scholar and the subject. The self must be made known to the reader in order for connections to the subject to be made. Subjectivity, emotion, lens, and vulnerability should be brought out, not as a “decorative flourish” but as a path to a place where we would otherwise be unable to go. Keeping a research journal, being reflexive,
and using my own participation and experience as a source of data and a discussion point allowed me to negotiate where I was along the continuum between scholar and subject. I also did not thru-hike the trail as my participants were doing. I did do one long-distance hike and one shorter two-day hike; this allowed me to see my participants’ points of view while still remaining separate in a way. I also spent about three weeks engaged in the Appalachian Trail community, which allowed me to experience the culture of the AT.

Data Analysis

Lincoln and Guba (1985) remind us that data analysis is not a distinct phase set to occur at a specific time, but must occur from the beginning of the study to the endpoint. The data of this interpretive research—gained from interviews, observations, documents, and journaling—necessitated a method of analysis very similar to that of ethnographic studies (Lincoln & Guba, 1985). Lincoln and Guba (1985) suggest grounded theory as the analysis method that is most in line with the analytic induction technique of ethnography. Analytic induction requires the researcher to create categories of phenomena through examination of the data, and to provide explanation for all cases by modifying and refining the categories and relationships amongst them as new phenomena are discovered (Lincoln & Guba, 1985). Grounded theory is similar in that it also requires the categorizing of data through coding, as well as a constant comparison of data to data, data to codes, and codes to codes in order to interpret and understand a process or phenomenon (Charmaz, 2006).

The way that this study was designed and carried out, however, necessitated that grounded theory not be used. I completed a review of literature before collecting and
analyzing data. I also utilized a theoretical framework. Lastly, I did not generate a theory, nor had I planned to generate one. These practices are not generally included in strictly grounded theory studies (Fram, 2013). However, Fram (2013) argues that the constant comparative analysis method from grounded theory can be utilized outside of grounded theory and indeed has a history of being used this way in the literature. Therefore, this study utilized the constant comparative analysis method (Glaser & Strauss, 1967) to support the naturalistic inquiry design. Using the constant comparative method outside of grounded theory is particularly supportive of naturalistic inquiry (Fram, 2013).

I examined the process of hikers’ place-making, learning, and connecting to nature and the outdoors. I analyzed the data inductively in order to allow findings to emerge from the data (Lincoln & Guba, 1985). Lincoln and Guba (1985) argue that a constant comparative method of analysis logically follows the naturalistic paradigm because of the multiple realities that are possible. The constant comparative analysis method has become a well-utilized way of analyzing data in qualitative research. They argue that constant comparative coding entails breaking the data apart and giving it a defining label. An important tenet of the constant comparative analysis method is that codes arise from the data and are not applied to the data (Lincoln & Guba, 1985). It is important to note for this particular study that a grounded theory was not generated, although constant comparative analysis methods were borrowed from grounded theory. As this study was designed as a naturalistic inquiry, I used only constant comparative analysis methods in the analysis of data, and a purely descriptive account was generated.
Constant comparative analysis was used because it is inductive and comparative, which is compatible with interpretive research; many qualitative researchers utilize this method without seeking to build a theory (Merriam, 2009).

All data sources were analyzed using the constant comparative method (Merriam, 2002). The data were broken and arranged into substantive themes. Maxwell (2005) states that this type of categorizing is descriptive, “stay[s] close to the data categorized, and [doesn’t] inherently imply a more abstract theory” (p. 97). The constant comparative analysis method necessitates moving back and forth between data collection and analysis and involves a constant comparison of data with data (Charmaz, 2011). Data analysis began in the early stages of the project during the data collection itself. Again, memos were used during this process, as Maxwell (2005) states, not only to “capture [the researcher’s] analytic thinking about [their] data, but also facilitate such thinking, stimulating analytic insights” (p. 96). Data sources were coded for initial tentative categories and each incident was constantly compared with the emerging categories in order to produce an overall framework (Charmaz, 2011). The analysis procedures and sequence will be explained in more detail.

In order to answer each of the research questions, certain data sources were utilized and given priority. For example, the interviews, as the primary data collection method in this study, were used in the answering of all of the research questions. Observations, however, were only used to answer certain questions. Table 1 shows the ways each source of data collected addresses the research questions.
Data analysis was carried out in overlapping steps throughout the study. Creswell (2009) suggests that analysis should begin with organizing and preparing raw data for analysis. The next steps would be to read through all the data, code the data, generate descriptions, categories, and themes, and decide on how to represent the data. The final step is to interpret the meaning of the data and determine the fundamental elements of the phenomenon (Creswell, 2009). The analysis design of this study followed this path.

Table 1

*How Data Sources Address the Research Questions*

<table>
<thead>
<tr>
<th>Question #</th>
<th>Observations</th>
<th>Interviews</th>
<th>Memos &amp; Journaling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1- Hikers’ lived experiences &amp; place-making</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>a.- Experiences</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b.- Experiential Learning</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Q2- SLE, influences, reasons for hiking</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Q3- Connections to nature</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>a.- Conceptions of nature</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b.- Evolution of place-making</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Data analysis began with the first data collection/hiking period in April of 2013. During this one-week period, set 1, round 1 interviews took place along with periods of
observation. Analysis began in the field as data was being collected. At the end of each day in the field, I reflected on any data gathered that day, which could be field notes, interviews, informal conversations, or journaling. This daily reflection exercise served as a form of initial analysis by allowing me to engage in memo-writing. Memo-writing was critical to my constant comparative analysis because it necessitated that I begin analysis of data as soon as I started the research process (Charmaz, 2006). The act of memo-writing involved recording initial thoughts about emerging data (Charmaz, 2006).

The first round of data collection, which included observation, interviews, and researcher journaling, was completed in late April of 2013. Immediately following, interviews from set one, round one were transcribed and initial coding of all data sources began. Qualitative coding allows a researcher to synthesize collected data and determine what the data might mean (Charmaz, 2006). Charmaz (2006) defines coding as “categorizing segments of data with a short name that simultaneously summarizes and accounts for each piece of data” (p. 43). All data sources were read through at least three times.

Initial coding began with comparing data to data, while being open to discovering any theoretical possibilities that were revealed in the data (Charmaz, 2006). Initial coding adhered closely to the data. Charmaz (2006) tells us that using action words in initial coding decreases the tendency to automatically make conceptual leaps, which should not be done at this stage of data analysis. Although I attempted to follow this part of the analysis protocol, due to the theoretical nature of some of the research questions it was not possible to keep to strictly action words during initial coding. Many of the ideas
pertaining to the research questions were simply not action-oriented. For example, many codes or themes pertaining to ideas about identity were not able to be described using action words. However, other codes were action words, such as awareness of nature, enacting power over nature, or learning. The next two read-throughs of data used incident to incident coding. In incident to incident coding, incidents are compared to incidents, incidents are compared with conceptualizations of incidents, and properties of the emerging concepts are identified (Charmaz, 2006). Coding was framed by the research questions, specifically by the terms defined in the research questions. These terms were space, place, identity, power, experiences, experiential learning, significant life experiences (SLE), formative influences, reasoning, intense nature experience, connect/connections, and conceptions. These concepts provided a framework to help me in deciding what was code-worthy. It was imperative that even though I was guided by these terms that I allowed codes to emerge from the data without applying these terms as codes. This would betray a central tenet of constant comparative analysis. For example, the theme of “awareness of nature” emerged from the data. Even though this theme connected to and supported the theoretical tenets of critical geography and directly answered the research question, I had not read the data looking for examples of awareness of nature. It was an idea that came through the data.

The second round of data collection, which included observation, interviews, hiking, and researcher journaling, was completed in June of 2013. Immediately following, interviews from set one, round two were transcribed. Initial coding of all data from the second round of data collection was then carried out. All data sources were read
through at least three times. Immediately following the initial coding of the second round data sources, focused coding of data collected from round one and round two occurred. During focused coding, all data was read through at least three times. Focused coding necessitated that slight changes be made to future data collection, particularly some of the interview questions about space, place, power, and identity. After the initial experience of my first data collection period, and initial read-through of the data and my research journal as well as the second round of coding, I determined that changes to the interview protocol were needed.

One change was in how I asked about identity. This seemed like a difficult idea for participants to articulate. Therefore, instead of asking participants in a direct way about their identity, I decided to skip that question during the interviews. From my initial and secondary coding of the data, I realized that participants talked about their identity through answering other questions. Some people identified aspects of themselves in their reasoning for answering a certain way. For example, Darjeeling often said “I am a Christian” as an explanation for why he felt a certain way. Another example is TV Idol, who claimed that he was “not woodsy” and “not outdoorsy.”

Another change to the interview protocol was made to attempt to get more meaningful data for questions about space, place, and identity and the relationships among them. In order to do this, I added a reading prompt to end each interview:

**Critical geography**, as compared with geography as a field of study, involves examining, borders, border crossing, spaces, places, and identity in an all-inclusive way. It is not only making maps, but also making meaning of maps.
Space, place, and identity are interconnected in critical geography. Each element of space, place, and identity is formed and reformed during different experiences. Critical geography allows us to openly look at identity and place-making in nature, as well as to examine the conception of nature as a physical place that one may visit, explore, conquer, or protect.

Space, place, identity, and power are the main parts of critical geography. A place is as an area or location that a person feels something about, or has some experience in. A space is an area that a person has no feelings about, or has never experienced. Identity means one’s self, character, personality, or how a person categorizes them self. Power refers to control, influence, or impact between individuals, groups, places, organisms, or environments.

I would ask participants to read the prompt and then I would ask if they had any comments or thought about it. If they had said something in their interview that related to the prompt, I would bring it up and we would discuss how the comment related to the prompt. This allowed me to get deeper insight into participants’ thoughts about some of the more theoretical pieces of the study.

The focused coding was more directed, selective, and conceptual than the initial coding and was used to synthesize and explain larger segments of data (Charmaz, 2006). Figure 11 shows the process of initial, focused, and axial coding through the example theme of social learning. Earlier codes from the initial coding of that data that were more frequent or particularly significant were used to sift through the larger amount of data. This required me to make decisions about which codes fit the data in the most insightful
and comprehensive way (Charmaz, 2006). Charmaz (2006) explains that focused coding compares data to data, and then moves to compare data with codes, which aids in refining the codes.

Figure 11. Coding Process

The third round of data collection, which included observation, interviews, researcher journaling, and one follow-up interview with one participant, was completed in late September of 2013 and October of 2014. This completed the data collection for the study. Immediately following the conclusion of all data collection besides the follow-up interview, interviews from set one, round three were transcribed. Initial coding of all data from the third round of data collection was then carried out. Data sources were read through at least three times.

Immediately following the initial coding of the third round of data sources, focused coding of all data collected from round one, round two, and round three occurred. During focused coding, all data were read through at least three times, although some interviews were read through more than others. I also went back to the
initial recordings of the interviews in order to hear the participants speak in the context of the interviews. This allowed me to refresh myself with the voice, attitude, and inflection of each participant. It also aided in analyzing interviews that involved more than one participant at a time. Following the focused coding, axial coding was used. All data sources were read through at least four times during axial coding, again with some interview transcripts being read through more than others. Once axial coding had been done, theoretical coding of all data occurred. Data was read through at least five times during this phase of analysis.

Charmaz (2006) explains axial coding as a method of analysis that relates categories to subcategories, defines the categories, and reconstructs the data that has been broken apart by the act of initial and focused coding. This allowed me to describe the experience of participants in more depth and allowed me to make sense of the data (Charmaz, 2006). Axial coding clarified my emerging ideas about the data and helped me to develop a more in-depth grasp of hikers’ experiences and place-making (Charmaz, 2006). Axial coding pulled the data back together, which was necessary before theoretical coding could occur. Theoretical codes identified potential associations and connections among categories that were established during focused coding (Charmaz, 2006). Theoretical coding was carried out by identifying and clarifying the general context and specific conditions in which particular experiences were apparent (Charmaz, 2006). The theoretical framework, critical geography, that was employed in this study is a vital component of the coding and analysis process. The terms space, place, identity,
and power are central tenets of this theoretical framework and thus provided guideposts for the coding process.

**Reporting the Findings**

As theoretical codes were developed, they assisted in structuring how I reported the findings of this study in Chapter IV. Writing began during theoretical coding and continued after theoretical coding of all data had been carried out. The result of qualitative research is thick description (Geertz, 1973) of a phenomenon and therefore, the findings are presented in Chapter IV as descriptive, narrative text. The write-up of the findings was a construction of Appalachian Trail thru-hikers’ lived-experiences in terms of the research questions. The discussion speaks to the purposes of the study, which were to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impact the actor’s place-making and in turn are impacted by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an informal nature experience. Writing was completed when the ability of the data to speak to the research questions was exhausted.

**Summary**

A naturalistic inquiry informed by critical geography was used to investigate the experiences of hikers on the Appalachian Trail and their connections to nature, learning experiences, and formative influences. This study informs multiple bodies of literature, as well as stimulating environmental education to reconsider the goals of the field and
determine if EE is meeting them. The researcher studied nature experience and connection, significant life experiences and formative influences, as well as experiential learning. Results of the study inform the field of environmental education as well as science education.
CHAPTER IV
FINDINGS

I only went out for a walk and finally concluded to stay out till sundown, for going out, I found, was really going in.
~ John Muir, *John of the Mountains: The Unpublished Journals of John Muir*

I am losing precious days. I am degenerating into a machine for making money. I am learning nothing in this trivial world of men. I must break away and get out into the mountains to learn the news.
~ John Muir, *Alaska Days with John Muir* by Samuel Hall Young

Most people are on the world, not in it—have no conscious sympathy or relationship to anything about them—undiffused, separate, and rigidly alone like marbles of polished stone, touching but separate.
~ John Muir, *John of the Mountains: The Unpublished Journals of John Muir*

The above quotes from John Muir show that experiences in and of nature are complex, capricious, and powerful. I chose these quotes because they are a powerful and eloquent representation of some of the ideas that emerged from this study. This dissertation was a naturalistic inquiry into the experiences of thru-hikers on the Appalachian Trail. Through the process of designing and carrying out this study, I generated thick descriptions of the lived experience of thru-hikers with the Appalachian Trail environments and community. The purposes of this study were to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impacted the actor’s place-making and in turn are impacted by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an
informal nature experience. The research questions were guided by this purpose. The questions that this study attempted to answer were:

1. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning takes place and how does it occur?
2. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?
3. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
   b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature?

This chapter is divided into two main sections. The first section describes the context in which data was collected, as well as participant information. Data from field notes, my participant observer research journal, and participant interviews were used to construct these descriptions. This context sets the stage to understand thru-hikers’ experiences and provides a thick description of the setting. It also serves to introduce the participants and reveal a picture of where in time and space participant data was collected. The second section of this chapter presents the overall themes that emerged in
response to the research questions. This section is organized by research question for the purpose of clarity as well as transparency in showing how each question was addressed.

**Context: Data Collection and Participants**

As discussed in Chapter III, participants were recruited at different sites along the Appalachian Trail. The participants for this study were randomly recruited and interviewed during some portion of their AT experience. As stated in Chapter III, three recruitment events took place. This meant that participants were interviewed at different geographical points on the Appalachian Trail and thus were at different points in their AT experience. However, all participants were northbound thru-hikers and began their hikes at the southern terminus in Georgia at the beginning of the hiking season. Table 2 presents the pseudonyms, demographic information, and interview context for each participant.

Pseudonyms were not selected randomly for participants. Identity is an important element of the findings of this study and the trail names that thru-hikers chose or received were meaningful to them and revealed aspects of their identity. In negotiating between being true to participants’ identities and maintaining ethical standards of anonymity for study participants, I created pseudonyms that were either similar to participants’ trail names or that indicated aspects of their identities that were revealed during interviews and interactions with participants. I did not assume that the chosen pseudonyms revealed what the participants themselves would consider meaningful aspects of their identity, however I attempted to be true to the participants as I knew them.
Table 2

**Participant Information & Interview Context**

<table>
<thead>
<tr>
<th>Trail Name (changed for anonymity)</th>
<th>Demographics (C=Caucasian, S=Spanish, MI=Mexican-Irish, KA=Korean-American)</th>
<th>Interview Set</th>
<th>Interview Context</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Idol</td>
<td>Age 21, Sex M, Ethnicity C, Location Laundromat; Damascus, VA</td>
<td>4/19/13, ~10:30am</td>
<td>Interviewed alone</td>
<td></td>
</tr>
<tr>
<td>Darjeeling</td>
<td>Age 23, Sex M, Ethnicity C, Location Blue Blaze Café; Damascus, VA</td>
<td>4/19/13, ~12:30pm</td>
<td>Interviewed with Growing Pains for 1st half of interview, Christian (self-identified)</td>
<td></td>
</tr>
<tr>
<td>Wandering Farmer</td>
<td>Age 45, Sex M, Ethnicity C, Location Blue Blaze Café Bar; Damascus, VA</td>
<td>4/1913, ~2:00pm</td>
<td>Interviewed alone, Catholic (self-identified)</td>
<td></td>
</tr>
<tr>
<td>Growing Pains</td>
<td>Age 31, Sex F, Ethnicity S, Location Blue Blaze Café Bar; Damascus, VA</td>
<td>4/19/13, ~12:30 &amp; 6:00pm; 4/21/13, ~8:30am &amp; ~12:00pm</td>
<td>Interviewed with Darjeeling for 1st half of interview and with Candy Elf for the 2nd half and on trail interviews; Gay (self-identified)</td>
<td></td>
</tr>
<tr>
<td>Candy Elf</td>
<td>Age 25, Sex F, Ethnicity C, Location Blue Blaze Café Bar; Damascus, VA</td>
<td>4/19/30, 6:00pm; 4/21/13, ~8:30am &amp; ~12:00pm</td>
<td>Interviewed with Growing Pains for the 2nd half of the interview and on trail interview.</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Gender</td>
<td>Location</td>
<td>Date</td>
</tr>
<tr>
<td>----------------</td>
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<td>--------</td>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Liege</td>
<td>25</td>
<td>M</td>
<td>Damascus, VA</td>
<td>4/21/13</td>
</tr>
<tr>
<td>Sparrow</td>
<td>23</td>
<td>F</td>
<td>Damascus, VA</td>
<td>5/17/13</td>
</tr>
<tr>
<td>Silent Spring</td>
<td>24</td>
<td>F</td>
<td>Damascus, VA</td>
<td>5/17/13</td>
</tr>
<tr>
<td>Two Dog</td>
<td>40</td>
<td>M</td>
<td>Appalachian Trail Conservancy Headquarters &amp; Visitor Center; Harpers Ferry, WV.</td>
<td>6/16/13</td>
</tr>
<tr>
<td>Goodwill</td>
<td>22</td>
<td>M</td>
<td>Cannonball Deli Patio; Harpers Ferry, WV</td>
<td>6/17/13</td>
</tr>
<tr>
<td>Fraulein Fertzig</td>
<td>22</td>
<td>F</td>
<td>Cannonball Deli Patio; Harpers Ferry, WV</td>
<td>6/17/13</td>
</tr>
<tr>
<td>Hündchen</td>
<td>21</td>
<td>F</td>
<td>Cannonball Deli Patio; Harpers Ferry, WV</td>
<td>6/17/13</td>
</tr>
<tr>
<td>Pioneer</td>
<td>29</td>
<td>M</td>
<td>Ed Garvey Shelter on the AT (7.7 miles from Harpers Ferry)</td>
<td>6/18/13</td>
</tr>
<tr>
<td>Methuselah</td>
<td>65</td>
<td>M</td>
<td>Mena's Pizzeria; Harpers</td>
<td>6/19/13</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Gender</td>
<td>Ethnicity</td>
<td>Room</td>
</tr>
<tr>
<td>--------</td>
<td>-----</td>
<td>--------</td>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>Fortis</td>
<td>53</td>
<td>M</td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>Nails</td>
<td>47</td>
<td>F</td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>Desert Fox</td>
<td>31</td>
<td>M</td>
<td>MI</td>
<td>3</td>
</tr>
<tr>
<td>Freebird</td>
<td>29</td>
<td>M</td>
<td>C</td>
<td>3</td>
</tr>
</tbody>
</table>

The demographic information shown in Table 2 was provided by the participants. I did not require that participants provide any demographic information about themselves. However, most participants filled out this optional piece of the consent form, or mentioned their age during the interview. Reporting of ethnicity was also completely voluntary and at the discretion of each participant. Participants were mostly Caucasian; only 3 participants identified as non-white. This was not surprising, as there are not many minorities that thru-hike the Appalachian Trail (Hill et al, 2014). Two of my participants, Fraulein Fertzig and Hündchen, were from Switzerland and had travelled to the U.S. for the sole purpose of hiking the Appalachian Trail. I interviewed 11 men and 7 women. This is reflective of the fact that there are more men that thru-hike the AT then women (Hill et al, 2014). One participant self-identified as gay, one participant self-identified as Christian, and one participant self-identified as Catholic. The participants ranged from 21 to 65 years of age.
Data collection was conducted at three time intervals. Participants that interviewed during my first data collection period were in their first phase of hiking and had only been on the trail for one to two months. This set of interviews is labeled in Table 2 as “1a” or “1b.” The 1a data collection set took place in or near Damascus between 4/19/13 and 4/21/13. The 1b data collection period took place at the Trail Days Festival in Damascus on 5/17/13. Participants interviewed during my second data collection period were at the midpoint of their hiking experience and had been on the trail for two to four months. This set of interviews is labeled as “2” in Table 2. Participants interviewed during my third data collection period were just about to enter the 100 Mile Wilderness, at the end of which is the summit of Mt. Katahdin and the completion of northbound thru-hikes. These participants had been on the trail for five to seven months and were about to finish their thru-hike of the Appalachian Trail. This set of interviews is labeled as “3” in Table 2.

Interviews took place in a number of different contexts. Most of the interviews took place in trail towns (towns along the path of the Appalachian Trail where hikers can stop to resupply or stay in hostels for a few nights). Some interviews took place on the Appalachian Trail during hiking periods. Growing Pains and Candy Elf invited me to hike with them for two days after I had interviewed them at the Blue Blaze Café Bar. I interviewed them briefly on the second day of our hike, once in the morning at the shelter and once in the afternoon while stopping to eat lunch. Two Dog, Goodwill, Fraulein Fertzig, and Hündchen invited me to hike with them for two days after I had interviewed
them in Harpers Ferry, WV. I interviewed them briefly on the first evening of our hike, when we reached the shelter.

Many participants chose to interview with fellow hikers, which gave them opportunities to interact with each other during the interview process and talk about group experiences that they had together. Growing Pains participated in an interview with Darjeeling and then did the second half of her interview with Candy Elf. Growing Pains and Candy Elf also were interviewed together while we hiked together for two days. Sparrow and Silent Spring were childhood friends so they were interviewed together at the Trail Days Festival in Damascus, VA. Goodwill, Fraulein Fertzig, and Hündchen interviewed as a group, as did Desert Fox and Freebird, who were also childhood friends. Group interviews were not anticipated in the planning stages of this study, however I left this decision up to the participants. If participants were hiking together they could choose whether to interview on their own or with each other. For example, two participants who were married and had hiked together every day as a team chose to interview separately. The option to interview as a group or pairing helped participants to be more comfortable. It also allowed participants to discuss ideas which led to richer data. In some group interviews, one participant would always answer a question before the other person, which may have influenced how the second speaker answered. However group dynamics were always friendly and respectful.

Emergent Themes

This section presents the findings which emerged from the data. Using interviews, observations, and a participant observer research journal, I attempted to
discover thru-hikers’ lived experiences of the Appalachian Trail. Major themes emerged from the analysis. These themes are discussed in terms of each research question. Any findings and/or thoughts that come specifically from my participant observer research journal are set aside as a block quotation and italicized. This served to separate any ideas that came exclusively from myself. It is also treated separately in the writing because it is very personal and somewhat informal. Therefore it is not necessarily typical of the data included in a research report. However, I found it important to discuss my own experience as a participant observer and how my experiences were both similar and different in context and content from my participants. Scholarship about participant observation supports such an approach (Agar, 1996; Behar, 1996; Geertz, 1973; Merriam, 2002; Page, 1991; Rosaldo 1993).

**Research Question 1**

In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience? The experience of hiking the Appalachian Trail influenced the iterative and recursive relationships between space, place, power, and identity. A number of emergent themes addressed this idea. First, participants had varying levels of awareness of nature. Second, there was a clear distinction for many participants between being a visitor in a nature space and being a part of nature. The third theme that I discuss is how power manifested in various ways for different participants.
**Emergent theme: Awareness.** One theme that emerged from my analysis was “awareness.” Participants seemed to be aware of nature in varying degrees and at different scales. Where a participant was on this “awareness” continuum seemed to have a significant impact on their experience of hiking and experiences of nature. I conceptualized this idea of “awareness” as distinct from the sensual or physical act of being aware of one’s surroundings. “Awareness” of nature as a conceptual theme for this study concerned a person’s philosophical awareness of nature as a space, place, and/or idea and consistently appeared as an idea connected to participants’ identities and/or their inner selves. In brief, I differentiate “inner awareness” from “outer awareness.” This awareness was also connected to how participants bounded/bordered nature as a place or idea, which I discuss further in answering research question 3.

The data that supports this theme came from two participants on opposing ends of the awareness spectrum. (I also present awareness profiles for all participants.) One participant, Fortis, was extremely aware of nature and was a powerful representative of participants who are attentive to nature in a space. Even though part of Fortis’ reason for thru-hiking the Appalachian Trail was in honor of his dog that had recently died, as well as for the challenge and a love of hiking, he also immediately stated that “I just love the outdoors. It’s awesome and I love nature.” Fortis’ statement about the awesomeness of nature and how this was a primary reason for hiking began to reveal that nature appreciation was a part of his identity. He went on immediately to say that:
[The] experience of nature, I think is more perception than it is on the out. Really, some people can be out in the woods and they’re not with nature. They’re outdoors, but they’re not with nature. (Fortis)

Not only does this statement show that Fortis exhibited an inward awareness of nature through his interview, but he was cognizant of this idea of awareness of nature and knew that this made him different than some thru-hikers. This was very apparent when I inquired about some of his previous nature experiences before hiking the AT:

Well, I was military in Alaska so quite a bit of experiences . . ., I put in for, put in for Panama and Alaska as a paratrooper and went to the jungle and went to Alaska and I got Alaska and was thrilled to death about it where most of the people I went with were “awe, no,” wasn’t the duty they wanted . . . Yeah, it’s, there again, it’s your perception of what it is, you know . . . And Alaska was unbelievable, it was just unbelievable, loved it! But if you weren’t the person to enjoy what it had to offer, you were pretty miserable. (Fortis)

Again, in this statement Fortis revealed that he had a different perception of nature and that this perception allowed him to enjoy nature around him. Fortis was one of my final interviews, and he put words to this idea of awareness that I had heard during my previous interviews. In talking about some of his hiking experiences later in the interview, he again revealed his high level of nature awareness:

We saw bunch of Copperheads, they’re a beautiful snake, I really think they’re pretty . . . So I’ve got some good pictures of those. Some turtles that were pretty unique looking, different box turtles and I think the smaller stuff was the kind I
had to look for, the insects. That you just gotta have to, you have to be aware and looking for ‘em and it’s there. And I think someone was telling me that they went through and they were identifying all the different flowers that were in bloom throughout the trail you know, and, and, and I was astonished the number of different varieties from that stuff you know, like just in the Smoky Mountains alone, it’s unbelievable. I wish we could come through there in the spring but it’s quite amazing the life forms in that big ecosystem that are in the Smoky’s.

(Fortis)

Here, Fortis mentioned that in order to experience some aspects of nature, such as insects, you need to be aware of them and consciously look for them. He mentioned a number of different organisms that would be easy to miss if you were not keeping an eye out for them, such as snakes, turtles, and flowers in bloom. He said “you have to be aware and looking for ‘em.” Statements like this showed how attentive Fortis was to nature during his hiking experience. He also focused more on his nature experiences than his social experiences, unlike many of the other participants. For instance, consider the following experience, where Fortis was aware of a hornets’ nest that other hikers had walked right past:

I did see a hornet nest right before coming into this town, we got some good pictures of a bald-faced hornet . . . And so I asked everybody that I, that came in town here, I said “Did you see the hornet nest?” “No!” I told them, “Right there above your head!” So you just wonder how many people..., in fact, when I got across the river, which is a decent distance, there was another hiker there. I said,
“Did you see the hornet nest?” He goes “No!” And I pointed to it and I said you know, “You can see it clearly from the other side of the river.” That’s how, that’s how large it was. (Fortis)

Fortis was highly aware of nature and this quote is a good illustration of how his awareness allowed him to notice a lot of nature elements on the trail. He was very surprised that other hikers did not see the large hornets’ nest that was so apparent to him. These excerpts show how Fortis’ level of awareness made his hiking experiences more nature-oriented. The nature awareness that he possessed influenced what he saw around him and how he interpreted that into a lived experience of nature.

TV Idol represented an opposing profile of nature awareness. Although TV Idol participated in outdoor play as a child, had an outdoor job (bike messenger), and was a trail runner and cyclist before beginning his hike on the AT, he did not connect any of these outdoor activities to nature and was mostly “unaware” of nature while hiking on the trail. Even after telling me about all of these outdoor experiences, when I asked him what prior nature experiences he had before beginning his hike he said, “Like, basically none . . . I was in Cub Scouts . . . So, that’s really it.” Therefore, even though his active lifestyle took place outdoors, he did not see, or was not aware of, nature in these spaces. TV Idol’s lack of philosophical awareness of nature exemplified one extreme of this awareness continuum. TV Idol had mentioned the challenge of the thru-hiking experience a number of times in his interview and how this gave him “clarity of mind.” When I asked him if it was more the challenge of this thru-hike that brought him clarity
of mind or the austerity of being in/with nature that brought him clarity of mind, he replied:

No, because it’s not that. It’s not that at all. You know, some people they try to like, they try to . . . come out here. Like a lot of people they come out here and they want to like be alone and they want to like not stay in shelters and whatever, and I mean, I, like, I like hiking with other people. There’s no real like . . . it’s not some like Emerson thing where I prefer nature over man type of thing. (TV Idol)

Here, TV Idol said “it’s not some like Emerson thing.” Ralph Waldo Emerson was a leader of the Transcendentalist movement and wrote an essay entitled *Nature* (1836). TV Idol attempted here to distinguish himself from hikers who want to experience and connect to nature on their hike. He says “It’s not that at all” when I ask him if it is the austerity of being in/with nature that brings him clarity of mind.

When I asked him about his experiences with nature so far on the trail, he said “I don’t know. Like I feel like for me like the nature sort of takes a back seat . . .” This showed that he was more aware of other types of experiences rather than nature experiences. He went on to say:

I’ve stopped taking pictures of like views and stuff . . . Like, you know, your regular views like being on like a crazy mountain top or whatever. But I don’t know, I stopped taking pictures of them because maybe I’m really not like an outdoorsy person. It doesn’t, I’m starting to realize from the way I’m answering these questions that I’m probably not. Because when I’m taking pictures of the
views, I just feel like, well I should probably take a picture of this because that’s
probably what you’re supposed to do. But I’ve just been taking pictures of like
people I’m hiking with, like taking pictures with them and what not. (TV Idol)
Here he described how he only took pictures of nature scenes because “that’s probably
what you’re supposed to do.” TV Idol was also illustrating how he was much more
aware of the social aspects of his experience than the nature aspects when he said “I’ve
just been taking pictures of the people I’m hiking with.” His assertion that he was not an
“outdoorsy person” and his realization that his manner of answering the interview
questions was making him see how this might be part of his identity. This also showed
the generative and reflective nature of the interview protocol.

I tried to see if there were any parts of nature that he might have noticed by asking
if there were any natural features that he enjoyed, and telling him I personally loved
seeing lichen on trees. He replied that “if there is something I look at least, it’s trees.”
This short statement revealed a lot about what TV Idol was or was not aware of while
hiking. The Appalachian Trail is heavily wooded in most portions of its length. Not
looking at or being aware of one of the most prominent physical features of the trail
reveals how little TV Idol noticed or engaged with the nature around him.

How this awareness of nature tied into TV Idol’s identity became very apparent
when I asked him about his connection to nature on the trail and if this connection was
different than in his everyday life. He said “Well, of course ‘cause I’m living in it.” He
had previously mentioned that he felt as if nature controlled him during his hiking
experience. Taking this statement along with his previous thought about nature being in
control, I asked TV Idol if his connection to nature had become more meaningful or if he just felt like nature controlled his experience. He replied:

I don’t know. I don’t have like spirit . . . like, I’m not . . . I’m not like a religious person . . . I’m out here more to like meet people then to like, you know, frolic in the . . . I don’t really have like, some people have like a deep connection with nature and they want to be just like with the woods and they don’t . . . they don’t feel, I mean, they just wanna do that, you know . . . But that is so . . . that is not me like at all. (TV Idol)

TV Idol felt that his connection to nature on the AT was different than in everyday life. However, this was not due to a personal or spiritual connection to nature but rather to the view that nature and the elements had a large impact on his experience of the trail. TV Idol’s awareness of nature was part of his personality and part of his identity. He separated himself from hikers who had wanted to be aware of and experience nature. He stated “that is not me at all.” Since he was not inwardly aware of nature he did not see his experiences as nature experiences. In other words, his identity influenced his experiences.

Although two extreme examples of nature awareness have been showcased above, all participants exhibited varying degrees of nature awareness. Table 3 shows the nature awareness profiles of all study participants. These profiles were created by distilling all instances when a participant revealed ideas or thoughts about their awareness of nature. Interestingly, from the data available, it did not seem that being on the trail longer influenced nature awareness in a meaningful way. For example, Fortis indicated that he
Table 3

**Nature Awareness Profiles**

<table>
<thead>
<tr>
<th>Trail Name</th>
<th>Awareness profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TV Idol</strong></td>
<td>Even though all his activities are outdoors, he does not see the connection, not aware of nature, nature takes a back seat to social experiences, “I’ve stopped taking pictures of views,” sees himself as a part of nature and a visitor in nature.</td>
</tr>
<tr>
<td><strong>Darjeeling</strong></td>
<td>Sees the views and appreciates them, sees changes in ecosystems, hasn't gotten tired of nature and hopes not to, our awareness/”enjoyment” of nature is what defines nature, sees himself as separate from nature.</td>
</tr>
<tr>
<td><strong>Growing Pains</strong></td>
<td>Emphasizes stopping to enjoy what is around you, hearing, smelling, seeing, trying things, aware of nature even in urban places, always looking around, sees herself as a part of nature.</td>
</tr>
<tr>
<td><strong>Wandering Farmer</strong></td>
<td>Has always loved to be outside, “all nature is interesting to me,” I enjoy every aspect of nature, even notice little things like acorns, notices nature even in an urban environment, sees himself as a part of nature.</td>
</tr>
<tr>
<td><strong>Candy Elf</strong></td>
<td>“You never know what is around the next corner,” sees other people walk by without awareness, aware of nature even in urban places and indoors, awareness that nature is more than a place but is also an idea, sees herself as a part of nature.</td>
</tr>
<tr>
<td><strong>Liegé</strong></td>
<td>Not overly aware of nature but still somewhat aware, counts centipedes as he walks, sees himself as “tragically” separate from nature.</td>
</tr>
<tr>
<td><strong>Sparrow</strong></td>
<td>Very aware of nature and wants to engage with it personally, bird watcher, very environmentally aware, enjoys being with nature and seeks it out on the trail, is sad when she has to pass by nature without interacting with it, “...we’ve had a pretty intense appreciation for nature before we got on the trail and so that appreciation has kept on, if not, gotten more intense,” sees herself as a part of nature as well as a visitor in nature.</td>
</tr>
<tr>
<td><strong>Silent Spring</strong></td>
<td>Aware of nature around her, but struggles with how to define “nature,” wants to enjoy nature while being environmentally responsible, negotiates between enjoying nature and preserving it / not altering or destroying it, sees herself as both part of nature and a visitor in nature.</td>
</tr>
<tr>
<td><strong>Two Dog</strong></td>
<td>Just being outside you might not be aware of nature but thinks that you must be aware of nature in order to be in nature - otherwise you are just outside, tries to be aware of nature everywhere but is more in tune to it in typical nature spaces, sees himself as a part of nature.</td>
</tr>
<tr>
<td><strong>Goodwill</strong></td>
<td>Somewhat aware of nature. Nature is stronger than him and he has to go along with it. Talks about nature experiences, but also about social experiences on the trail, sees himself as a part of nature.</td>
</tr>
<tr>
<td><strong>Fraulein Fertzig</strong></td>
<td>Doesn’t have a driver’s license because she likes to walk and be able to see nature around her, thinks nature is serene, sees herself as a part of nature.</td>
</tr>
<tr>
<td><strong>Hündchen</strong></td>
<td>Does not have a driver’s license because she likes to walk and be able to see nature around her, sees herself as a stranger in nature.</td>
</tr>
</tbody>
</table>
Table 3 (continues)

*Nature Awareness Profiles*

<table>
<thead>
<tr>
<th>Trail Name</th>
<th>Awareness profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pioneer</td>
<td>Aware of nature but sees some negative aspects; sees nature even in urban environments; wants to be a part of nature; has an explorer’s spirit; sees himself as a part of nature.</td>
</tr>
<tr>
<td>Methuselah</td>
<td>Ran through nature earlier in life; now that he is older and has to walk he can see and notice a lot more of it; he is out here to see nature; so it is nice when he gets to see animals; has a desire to experience the natural world; sees himself as a part of nature.</td>
</tr>
<tr>
<td>Fortis</td>
<td>Very aware of nature; metacognitive awareness of nature—he thinks about his awareness and it is a conscious decision to pay attention to nature; enjoys being in nature and enjoys interacting with it; wants his hike to be a nature experience; sees himself as a part of nature.</td>
</tr>
<tr>
<td>Nails</td>
<td>Somewhat aware of nature; aware of nature when in “wilderness” areas; sees nature through her husband (Fortis); sees herself as a part of nature.</td>
</tr>
<tr>
<td>Desert Fox</td>
<td>Aware of nature; spent a lot of time outdoors as a child but does not equate this to nature experience; sees himself as separate from nature.</td>
</tr>
<tr>
<td>Freebird</td>
<td>Enjoys nature; wants to be closer to nature; looks to nature to heal and become a better person; sees himself as a part of nature.</td>
</tr>
</tbody>
</table>

might begin to notice different things along the trail; however no one indicated that their awareness of nature altered after being on the trail longer. Nature awareness might be something that one picks up as a young child, similar to what the literature reports about environmental sensitivity (Hungerford & Volk, 1990). It is important to note here that I was only able to do a post interview with one participant, so it is possible that thru-hikers I interviewed became more (or less) aware of nature as they continued their hike.

In answer to the research question, contrasting TV Idol with Fortis revealed how much influence identity and nature awareness have on how one experiences a space/place. Fortis brought his awareness of nature with him onto the Appalachian Trail and so his experience was more deeply nature oriented. TV Idol’s lack of nature awareness created an experience that was more social than it was about nature. Although
TV Idol had hiked through various ecosystems and natural areas for 48 days at the time of his interview, he could not recount any nature experiences that were meaningful to him beyond the weather. It is important to note that I never defined “nature,” “outdoors,” or “nature experience” during an interview with a participant. All definitions of these words were left up to the participant. Therefore, when I asked “Have you had any experiences of nature on your hike so far?” the participants’ answers were their own conceptions of what constituted a nature experience. Even though TV Idol recounted a number of experiences and occurrences that fit with some of his personal conceptions of nature as he defined it, later in the interview he told me he had not had any nature experiences beyond the weather. He specifically defined the Appalachian Trail as a nature space in his interview but still reported that he had no nature experiences hiking the trail. In terms of nature spaces, place-making is tied to identity and experience. Participants brought a certain level of awareness with them on the trail which seemed to influence their experience of the trail and their place-making.

**Emergent theme: Visitors in nature.** Another theme that addressed identity and its connection to place is whether participants viewed themselves as visitors or participants in nature. Some participants identified as a visitor in nature while others identified as participants or part of nature. Some participants saw themselves as only a part of nature, however, all participants who viewed themselves as visitors in nature also thought that they were a part of nature.

Wandering Farmer, Candy Elf, Growing Pains, Two Dog, Pioneer, Fraulein Fertzig, Methuselah, Fortis, Desert Fox, and Nails all identified as being a part of nature.
When I asked if he saw himself as a part of or separate from nature, Pioneer replied “Very much a part. Small part, but you know, a part.” Pioneer saw himself as only a piece or “a small part” of a greater whole that is nature. Wandering Farmer said, “I always consider myself a part of nature.” Even when Wandering Farmer was not in a nature space he was still a part of nature. He went on to say that all humans are a part of nature: “Oh, definitely a part. I think everybody is. All humans are, whether they wanna believe that or not, I think they are.” He believed that humans as a species are a part of nature regardless of their own views on this matter. These replies indicated that these participants viewed themselves as participants in nature.

Sparrow, Silent Spring, Nails, and TV Idol all identified as being both a part of nature and a visitor in nature. Like the participants above, they felt that as a human, they were a part of nature but when they were in a nature space they were visitors in that space. Silent Spring is a good example of a participant who viewed herself as both a part of nature and a visitor:

I still always view myself as a part of nature. Uh, I guess the difference when I’m hiking is that I’m visiting nature. Um, I think that’s the big difference is that I’m still a part of it but it’s like I’m visiting their home, you know? So, I guess it’s kind of almost like even if, you know, you’re a part of a family and you’re like visiting your uncle’s home or something. It’s kind of how I look at it. (Silent Spring)

Although Silent Spring felt that she was always a part of nature, when she was hiking, she identified as a visitor in a nature space. She negotiated between identifying as a part
of nature and identifying as a visitor by comparing her ideas to being a member of a family. TV Idol also felt that he was a part of nature while also identifying as a visitor. When I asked him if he saw himself as being a part of nature, in nature, or separate from nature while he was hiking, he replied: “I’d probably say I’m in nature. I don’t know. I mean, I’ve got all this fancy gear and whatnot. I’m not going to sugarcoat it. Like, I’m in nature, I’m a visitor.” TV Idol had previously stated that he saw himself as being a part of nature, but this statement indicated that he felt differently when actually in a nature space. His “fancy gear” separated him from nature, perhaps because his conception of nature did not include man-made or human-oriented items.

Identifying as a part of nature could have an influence on how a person experiences a nature place. For example, Growing Pains talked about being a part of a nature habitat:

Just experiencing like the different animals and seeing them in their habitat and feeling like I also live out here with them now too, you know? This is my own habitat. I’m not just visiting, I’m, I’m living with them. So I think that’s been awesome. (Growing Pains)

Growing Pains indicated that her continued experiences of nature while hiking the AT allowed her to identify as being a living part of nature. In contrast, Sparrow’s identity as a visitor influenced her experience in different ways:

I see myself as a visitor really . . . When I explain LNT [leave no trace] that’s how I explain it is that if you were to go into your neighbor’s house and trash it, you know, go to the bathroom all over the place or throw your trash everywhere or rip
down the curtains or whatever—like, they’re going to be pissed. So, when I’m in
the physical environment as, you know—if you will I look at myself as a visitor
like I look at myself as fortunate to be there. Um, and I try to keep it as clean as I
would try to keep a neighbor’s house. You know, if I’m a visitor there I want to
do the same thing for all of the plants, the animals, um, that are out here as well
because, you know. I don’t look at it as like anything different. Um, I’m also one
that doesn’t look at you know humans separate from other animals. I think we’re
all a part of this cycle so-so yeah. (Sparrow)

Sparrow explained that her role as a visitor in nature stemmed from her views on
environmental responsibility. She talked about “LNT,” leave no trace, which is a practice
followed by most thru-hikers on the AT, as well as many outdoor enthusiasts. She
wanted to keep nature “clean,” so her desire to behave in environmentally responsible
ways seemed to lead her to act as a visitor in nature spaces. However, she still felt that
humans were not separate from other animals.

Silent Spring’s identity as a visitor in nature also influenced her experience of
hiking:

We’re definitely visitors out there. We’re obviously not living out there. We’re
just, you know, passing through, sort of. And um, you know, we—some people
could survive out there but we are not. We are relying on towns and stuff to
resupply and get food and—all this technology like super high-tech stuff—um,
that you know has a very large environmental impact to produce and everything.
Um, and so I kind of struggle with that actually. Like, as much as I like
backpacking—it just has a really—it can have a really big environmental impact. Um, and, uh, I do recognize that we are, you know, we are not sustaining ourselves out there. Um, and that’s—and like the 1964 Wilderness Act that’s like part of the Congressional definition of wilderness is like, you know, we’re—humans are visitors not living. (Silent Spring)

Silent Spring’s use of the Wilderness Act’s definition of nature showed her belief that humans were automatically visitors in nature spaces and did not live in those spaces naturally. She struggled with negotiating between enjoying nature and protecting it, and understood that sometimes our enjoyment of nature and our use of nature spaces for recreation can have damaging environmental effects. She went on to explain how her experience on the trail impacted her views:

This trip has made me think a lot more about how I want to live my life, uh, in relation to the physical environment. Like I don’t necessarily want to always be out in nature in a sense that I’m like so reliant on like really high-tech stuff and like stuff that’s just had a really huge environmental impact to make and stuff. I want to be able to rely more on just like the direct environment, like, eating more wild edibles and stuff like that. (Silent Spring)

In order for Silent Spring to feel more a part of nature, she had to first be more reliant on nature for survival. Her use of high-tech equipment in order to survive on the trail separated her from nature.

In answer to the research question, participants’ identities of being a part of nature versus being both a part of nature and also a visitor in nature influenced their experiences
of nature spaces on the Appalachian Trail. For some, such as Silent Spring and Sparrow, being a visitor meant respecting nature as well as being environmentally responsible. For others, such as TV Idol, being a visitor meant feeling that some boundary separated people from nature. Participants who felt that they were a part of nature saw themselves as connected to nature; it seemed like many of them saw all humans as a part of nature. This theme also linked with participants’ connection to nature, and is discussed further from that angle in answer to research question 3.

**Emergent theme: Power.** Power was a difficult theme to conceptualize because of the various ways in which power came through in the data. One way the idea of power emerged was in humans’ power over nature. Some participants felt that humans, organisms, and the environment were more or less equal, while others felt that humans had more intrinsic value than other organisms or the environment. This was not always something that was stated by participants, but instead was revealed through how they talked about their interactions with nature and their behavior toward nature. TV Idol revealed that he might view himself as having power over other organisms in his response to me asking him about his interactions with aspects of nature. He said,

> If I see a spider, I’ll flick it off. I won’t crush it because then I’ll probably get all its nasty shit all over me. Yeah, snakes, if it’s a garter snake, maybe we’ll poke it a little bit, get it a little pissed off. I mean, you get bored out here. But, yeah, how I relate to the natural world? I mean, I don’t try to like fuck it up. (TV Idol)

Even though TV idol said “I don’t want to fuck it [nature] up,” the way that he described his behavior toward other organisms exposed his view of himself as above certain
organisms like spiders and snakes. He did not express a high amount of respect for the organisms that share the Appalachian Trail with the thru-hikers. He talked about not crushing spiders, but this was not out of respect for the spider as a living creature. He also mentioned that “you get bored out here.” A few participants mentioned that monotony can sometimes set in, but many more said they always enjoyed the scenery. TV Idol’s boredom on the trail may be a result of his unawareness of nature in a place where nature is one of the main attractions.

Another form of power over nature emerged as “stewardship.” Stewardship has various meanings in environmentalism, but it is often associated with the Christian idea that humans are caretakers of all the other organisms on the planet (Palmer, 2006). Goodwill provided a good example of what stewardship means:

I think we’re different as humans. I think we’re stewards of the land . . . And that as being the ultimate living being on this planet, that we’re responsible for managing and overseeing animals. You just can’t let things go. You have to get involved. (Goodwill)

Goodwill pointed out that he saw humans not only as different from other organisms, but also as being more important. His statement of humans being “the ultimate living being on this planet” revealed how he saw the power dynamic between humans and the Earth. He felt that we should take care of the earth and be environmentally responsible, however his underlying reasoning for this position was mankind’s dominion over the earth. Darjeeling’s idea of stewardship was in a similar vein:
. . . if it’s nature, I think humans should, you know, be stewards of it. That’s how I see myself—that is how I see like the quintessential role of humans with nature . . . being a Christian, I think it was created in whatever way . . . I view it more as something we were given, something we should be stewards of. (Darjeeling)

Darjeeling viewed nature as something that humans were given, which indicated that humans own or possess nature. This ownership brought with it the responsibility of care, just as one would care for a house that they owned. However, the idea of ownership can also bring elements of dominion, mastery, and exploitation.

Two Dog’s idea of stewardship also seemed to come from a stance of dominion over other organisms:

I see humans as—I think that we’re stewards of this land and I think it’s very important—I didn’t want to get on a soap box when I came on this trail. But one thing I did want to share with hikers is a lot of this national land is funded from hunting and licensing and registrations . . . And fines and all that and hikers didn’t pay for that. It’s hunting. And so, I feel like I’m more of in that circle than a lot of individuals. There were only twelve million licensed hunters last year out of two hundred forty million. And so, I think we’re stewards of this land. And I think that it’s up to the biologists to set those game numbers and do those things but uh—yeah. (Two Dog)

Two Dog felt that as a hunter, he enacted stewardship in a more meaningful and active way than hikers. He believed stewardship was important and that it was connected in some way to hunting, which can be a dominant act over nature. It is important to
recognize that not all humans who hunt other organisms necessarily feel dominant over them, but hunting has been shown to be a dominance activity (Teel et al, 2012). Two Dog may have felt that as a steward of the land, he had the right to hunt other organisms for food. However, he felt that this was also an environmentally responsible behavior.

In answer to the research question, power as a structure was superimposed over the ideas of space, place, and identity. The data discussed above revealed that some participants viewed humanity as a powerful force that acted upon nature. Therefore, it was acceptable to believe that human existence and human experience takes precedent over that of nature. Some participants revealed that with this power comes the responsibility of care. Although stewardship can be a positive environmental attitude or behavior, the philosophical underpinnings of stewardship can present a number of troubling issues in terms of humans’ relationship to the earth and other organisms. One of the goals of environmental education is to create persons who care for and about the environment, but it is paramount that we understand the different ways in which care can be enacted. The concept of having power over the environment can impact how a person experiences nature spaces and how they care for them. For a number of participants, power was less obvious in their interviews. Therefore, this discussion was limited to the data available.

**Research Question 1a**

What experiences do hikers have during a thru-hike of the AT? Thru-hiking the Appalachian Trail is a significant experience in and of itself and is a highly personal journey. This being said, there were a number of themes that emerged in terms of hikers’
experiences on the trail. First, most participants described the experience of thru-hiking as being highly social. The second theme that I discuss is experiences of nature and the outdoors.

**Emergent theme: Social experiences.** A vast majority of the participants mentioned social experiences. Thru-hikers on the AT, as well as anyone associated with the trail – such as people in trail towns, owners of hostels, and owners of restaurants that serve hikers – form a tightknit community. Actors in this community formed very meaningful relationships and shared experiences with one another. Even participants who started their hike expecting it to be a nature experience or a self-exploration experience were surprised by the social aspects of the hike. Wandering Farmer was a good example of this. When I asked him about his expectations before he began his hike he replied that he was surprised by the social aspect of his hike so far:

> The people are different than I expected. The people were probably my biggest fear coming in to the hike. I’ve had a lot of experience in the outdoors, in the woods, in the wilderness. I can pretty—I had pretty good preconceptions of what that was gonna be like, staying alone or not, um, things like that. The people, I actually had told everyone at home, will either make or break the hike for me. The people, uh, that I’ve met thus far are wonderful. Um, and actually they, they make the hike better. The social aspects, I didn’t think I’d think I’d get into so much, and I really, really enjoy it. (Wandering Farmer)

Wandering Farmer went from being nervous about the social aspects of hiking to saying that the people on the AT “make the hike better.” He had expected a certain type of
nature experience, but was surprised by the positive social experiences that he was having. These social experiences even changed Wandering Farmer’s expectations for what the rest of his hike would be like.

Within the first week, I think my expectations of the hike changed as far as—more of a social aspect than I ever expected I’d enjoy out here. As opposed to the one on one wilderness kind of experience, which is there, but, um, I’m enjoying being with people a lot more than I ever expected I would be.

(Wandering Farmer)

From this statement, one can see that Wandering Farmer felt that social experiences and nature experiences were mutually exclusive. Wandering Farmer was one of the participants who felt that hiking the AT was an actual nature experience and he was both aware of and connected to nature. However, he was really surprised by how social the hiking experience was and, even though it was unexpected, he found that it was a very meaningful piece of the thru-hiking experience.

Fraulein Fertzig was also surprised by how much she enjoyed interacting with the AT community. She explained, “I love the people on the trail. But I didn’t know this before, they are great, it’s like a family. It’s my home now.” She reflected that she had not expected this would be the case but it was now an important piece of her experience. Fraulein Fertzig and her hiking partner, Hündchen, also mentioned a social experience that involved people who were not thru-hikers on the AT, but still part of the network that made up the Appalachian Trail community:
It was also great, we have, um, USA parents now because in (inaudible) it was so raining and we were pretty wet and dirty. And Dick, our daddy, USA daddy, he came to us and asked us if we would like to stay with him and his wife in house. And have dinner and all these things. And we stayed there for three day.

(Hündchen)

Hündchen revealed the interconnected nature of the trail community. Not only did the AT community include hikers, but it also included people living near the trail or in trail towns, as evident in Hündchen and Fraulein Fertzig’s story.

Liege also mentioned social experiences when I asked him about interesting experiences so far on his hike:

. . . one thing I found particularly interesting is kind of the hiker bubble that I’m hiking in, and this must, this is probably true for everyone else too, but I find it very interesting where I will go, probably about twenty or so hikers that I see on a regular basis, but since we’re all hiking at our own paces and taking different zero days, I’ll take a week and a half without seeing somebody, and then all of a sudden they’ll just stroll right up into my campsite. And it happens regularly.

There are twenty people I see inconsistently, but regularly. (Liege)

Liege mentioned the concept of a “hiker bubble.” Hiker bubbles are groups of hikers who are hiking at a similar enough pace that they see each other on the trail at least every few days or sleep at the same shelters on the same nights. Thru-hikers seemed to condense into a number of these “bubbles,” which you could see as waves of hikers entered the trail towns in groups. Liege talked about his hiker bubble as a group of
people that he came into contact with regularly and who he was therefore able to build social relationships with. Although he said that “we’re all hiking at our own paces,” which revealed that a thru-hike is a highly personal journey, Liege also mentioned that he saw certain people regularly who formed his personal community. This resulted in hikers that in some bubbles having different group experiences than those in other bubbles.

Two Dog talked about the social aspects of hiking when I asked him what had been the most significant experience during his hike so far:

I would say meeting people that you just met that you just instantly know you’re gonna be friends with beyond the trail, possibly for life. I mean, that’s profound to me. And that’s happened four times, four or five times. (Two Dog)

He regarded the experience of meeting people and forming social relationships as one of the most significant experiences during his hike to this point. He described the experience of making friends on the trail as “profound,” which revealed how important the social aspect of hiking was to Two Dog. Two Dog also told me about his “Trail Son,” a friend he had met on the trail and was currently hiking with who was a similar age to his biological son. The relationship of “Trail Son” and “Trail Dad” was very meaningful to Two Dog; he later introduced me to his trail son and I was able to interview him as well.

Pioneer also mentioned the social aspect of hiking when I asked him if his connection to the trail had changed since he began hiking:

Uh, very much, very much. Um, I’ve been here, um, through hell and high water, literally, on the AT now, um, and with the fellow hikers. Um, so individually and
collectively as a group, I feel, um, bonded and, you know, bound to the people, the hikers, and the trail. (Pioneer)

Pioneer bonded with his fellow thru-hikers. He explained that he not only felt connected to the trail itself, but also to other hikers and people. He also felt that he was connected to the AT not only as an individual, but as a social group. Candy Elf described how the AT is a community:

. . . the best description I’ve ever heard was at Wayah Bald Shelter where we got snowed on, there was a gentleman who was thru-hiking for a second time, named Aristotle. He was a former monk. He was pretty cool. Um, he described the trail as a 2000 mile long village. And that was, I thought, very apt. Because there’s so many people on it. You’re all out here for—everyone’s out here to hike the Appalachian Trail. (Candy Elf)

Candy Elf described the trail as a social community. She indicated that what made the AT a social experience were the people all hiking together and having the same goal of walking from one point to another. Freebird, on the other hand, talked about how non-hikers were also part of the AT community:

Um a big thing for hikers on the trail obviously is food and one of the coolest things with that is there is a place in Pennsylvania in Wind Gap it’s called the Beerstein and um we heard that the owner gives free breakfast and we’re like yeah that’s cool. There’s a grass yard out back that he lets hikers tent up on. So we tented up out there and in the morning the owner comes in, greets us and says hi. Let’s us . . . brings us in and the place doesn’t open until eleven but he
brought us in at nine. Brought us in the kitchen and opened up the walk and he said here’s the steaks, here’s this, here’s that, cook anything you want, have as much as you want and um it’s just super generous. A lot of generous stuff like that. I mean, we’ve come down off the mountain, get down to a road, and there’s a guy there that just hands you beers and takes you to dinner. We’ve had that happen - and I don’t know, a lot of those things tend to stick out in my mind, I just I never expected generosity you know, just amazing. (Freebird)

Freebird described how members of the AT community were not only hikers, but also people and businesses around the AT. He had not expected the members of the AT community to be so generous and caring, but this turned out to be a very meaningful experience of hiking. These experiences “stick out” in his mind and therefore these experiences may become some of the memories that he takes away from the trail. These experiences may be what make the AT a special and meaningful place to Freebird.

*The social aspect of the thru-hike experience was very rich and meaningful to many participants. Even hiking the approximately 60 miles of the trail that I hiked and preparing for my hikes and data collection periods, I was aware of the community aspect of the Appalachian Trail. There are a number of AT clubs for every region and state that the AT goes through, there are trail towns that survive because of revenue from thru-hikers and section-hikers, and trail magic provided by locals all along the trail. It is a vast and interconnected community and I can see why social experiences ranked so highly with my participants. Part of my personal experience as a section hiker during my periods of data collection was*
this social experience of community. Most hikers were very willing to sit down and talk with me for any amount of time and wanted to share their stories. People in trail towns wanted to aid me in finding participants for my study. One hostel owner in Maine even gave a few free nights to Freebird and Desert Fox for allowing me to interview them. This hostel owner also invited me and my husband into their home for a home-cooked meal that they were sharing with two thru-hikers. I was part of a hiker “bubble” with an entire family that was section hiking on the AT (and included an 87 year old woman), and they were friendly, welcoming, and wanted to know all about my study. One of my participants helped me do a “shake-down” of my pack to make it lighter before I went out hiking with him for two days on the AT. Although I still view a lot of my hiking experiences as nature experiences, I cannot deny that social experiences were a powerful and surprising piece of even my own AT experience. (Klein, 2015)

In answer to the research question, social interactions were a main component of many participants’ experiences on the Appalachian Trail. The data revealed that the AT was not only a walking trail, but also a community. Social interactions came across in all conversations in some form. For some participants, social experiences were the most significant piece of their overall hiking experience, whereas for others social interaction was important but not encompassing of their entire experience.

**Emergent theme: Nature experiences.** Although social experiences were very important to participants, they had other types of experiences as well. Nature experiences were another prominent code that emerged. One type of nature experience that came up
again and again was the experience of weather. Every participant mentioned the weather at some point in talking about their experiences. For a number of participants this experience had a negative connotation, but for others it showcased that nature was a powerful force. When I asked TV Idol what his most significant experience on the AT was so far he told me, “The Smokies,” and when I inquired if this was a negative experience he replied “Yeah. That was crazy. Because I mean, I’m from Miami. Like I’d never seen snow let alone eighteen inches of snow and like four or five foot snow drifts.” TV Idol felt that this new experience of snow was a negative experience. Many participants mentioned that the part of the AT that goes through the Smoky Mountains was very snowy this year, but they also said it could be one of the most beautiful parts of the trail. Pioneer talked about another negative weather experience:

I almost had hypothermia . . . I decided to backtrack to town instead of pushing on. Um, my thermal layer was wet, I didn’t have anything to put on, anything dry. And so, I basically decided that prudence was a better part of valor, and headed back three miles to Newfound Gap and went into Gatlinburg, instead of trying to push on . . . Uh, took a day off, got everything dry and came back out and actually finished the Smokey’s on schedule. Um, so that was, that was a pretty harrowing experience for me, so. (Pioneer)

For Pioneer, his weather experience caused an unsafe situation and impacted his personal wellbeing. The weather ended up being a frightening experience in this situation. Being on schedule seemed to be important to Pioneer, and the weather put him off his hiking schedule and impeded the experience he was wanting to have on the trail.
Wandering Farmer also mentioned weather as an experience:

So far on my hike, every time I’ve been in the elevation, higher elevations, the weather’s been miserable. I’m hoping that changes. Um, I’ve only really had one good viewing area and that was off Max Patch. Um, and fortunately I got up there early enough that the sun was still low in the sky and it was beautiful. Um, but other than that, every other, um, elevation of any significance, the weather’s been terrible, so. (Wandering Farmer)

Wandering Farmer wanted to experience views when he was at higher elevations on the AT, but the weather had been making him unable to have the nature experience that he wanted to have. Therefore the weather had been a negative experience for him. For Nails, the weather was an experience that was unexpected:

I did not expect the weather that we—that we actually have experienced. I—it was crazy, yeah. It was a crazy year in general and you know, and I thought that it would just be I don’t know, more of an—of a normal you know, like summer and you know, spring, winter kind of thing but you know, we’ve encountered ice and snow and heat, heat wave so that was kinda shocking and I did not expect that. (Nails)

Nails talked about her experiences of weather being widely varied. It seemed like the sheer variety of weather that she experienced on her hike was what made weather an encompassing experience for her. Methuselah also talked about the weather:

I’m not used to weather like this. I hiked the Pacific Crest trail, and I only had three days of rain in 2600 miles. I had three days in the first week here. So, that’s
been a real surprise to me, although it isn’t, you know, it’s a very wet spring. But, um. It’s just different, different course. (Methuselah)

Methuselah compared his Pacific Crest Trail hiking experience with his Appalachian Trail hiking experience through the weather. He had been hiking for many years and was an experienced outdoorsman, but the weather was a surprising aspect of his hike for him. He went on to talk about weather later in the interview as well:

Well, I think there’s definitely because of the weather this year and the past few years, I think there’s definitely climate change. It’s more evident every year that like, I mean, the weather just goes from one extreme from the other. (Methuselah)

Since Methuselah had been hiking and running in the outdoors for so many consecutive years, he used this anecdotal evidence of ever-increasing extreme weather to support his acceptance of climate change. Through his prolonged experience in nature, he made observations about long term weather patterns and applied this to ecological processes.

Desert Fox was also surprised by the novel experience of cold weather. He explained his experience as follows:

. . . the weather and the way it changes, um, how quickly it changes really got me. Uh, being in the Smokies to as cold as everything freezing was a new experience. Uh my boots freezing in the middle of the night, uh waking up and trying to put my foot in there and keeping my toes warm enough until we started hiking; it was very all shocking at first. (Desert Fox)
Desert Fox was from Phoenix, Arizona, so he had not really experienced very cold weather or heavy snow before hiking the AT. This made his weather experience novel and “shocking.” However, the phrase “at first” indicated that as he experienced more cold weather throughout the beginning of his hike, it became more normal to him. This might mean that he began to adopt this novel experience into the general day-to-day experience of hiking the trail.

Weather was a part of my Appalachian Trail experience as well. On my first data collection hike, I set out on a sunny afternoon with my mother. I thought that the sun made the hillside we crossed look spectacular. It was beautiful and serene. After hiking only a few miles, we were already fatigued since we did not have our “hiking legs” yet and were not used to having 35 pound packs. We came upon a family of section hikers (I mentioned this family previously) that had set up their tents just off the trail. They had a fire going so my mom and I decided that this was a good place to stop for the night.

We set up my tiny backpacking tent. This tent was made to be light weight so it was very thin, small, and it was held up only by my trekking poles. Right after dusk, as we were getting settled for the night, a huge lightning storm began. I have a lot of backcountry camping experience and consider myself to be decent with many outdoors skills. However, this storm was terrifying. It was pouring down rain on my tiny tent, the wind was blowing like crazy, and lighting was flashing constantly. I thought for sure that we were going to get hit by lightning
or crushed by a tree. For the first time in my life, I was nervous and scared in my tent.

After “surviving” our first night, the two days of hiking were nothing but rain showers, constant drizzle, fog and mud. I have to admit that it was even hard for me to appreciate the nature around me while slogging through the mud and attempting in vain to remain dry. However, an 87 year old woman (who by the way kept passing me up . . .) that was part of the section hiker family that were in our “hiker bubble” kept stopping to talk with my mom and I. She was telling me about how beautiful she thought the fog was on the ridges of the mountains and how much she was enjoying her hike. This woman helped me to see the beauty in the bad weather. So although I began my AT hike with a negative weather experience, I came out of it with a new appreciation for being able to see the awesomeness of nature even when nature is raining all over you. When I look back on the experience now, I feel like having really experienced the weather without being able to avoid it by going indoors made me feel more a part of nature. (Klein, 2015)

Weather as a nature experience was very prominent in most participants’ stories. Since hiking the Appalachian Trail was an experience that included walking for an extended amount of time in the outdoors, punctuated by brief stays in towns and nights in three-sided open shelters, it was not surprising that weather was an important factor in participants’ lives on the trail. The weather had a direct impact on the everyday experience of participants. In addition, because living outdoors for an extended period
was quite different than a hiker’s everyday life before they began hiking, the influence of
the weather was much more noticeable, since getting out of the weather was not really an
option.

Another prominent nature experience was seeing and interacting with organisms
on the trail. Experiences of plants and animals on the AT fell into categories of both
positive and negative experiences. TV Idol had a negative interaction with animals on
the trail:

I was with two other people here, and we, yeah, I came up on one person, what he says is a
black racer snake, and they just darted the hell like, it scared the shit out of me.
I’ve seen a lot of snakes, which sucks. And . . . yeah. That was terrible. (TV
Idol)

TV Idol’s interaction with this animal was a negative interaction. The snake surprised
and scared him. Instead of being excited to see wildlife, he said that seeing a lot of
snakes “sucks.” However, Fortis also had experiences of dangerous animals on the trail
and his response was completely different than TV Idol’s:

You know, my 2011 hike, I saw a bobcat, which is very rare. That was only
because I was alone and I would sit there. You know, as you were walking,
you’re not gonna see as much. (Fortis)

Fortis also mentioned a number of other experiences with wildlife that were all positive
experiences. Fortis was much more nature-oriented and nature-aware, so he was
purposefully trying to look for other organisms and have those types of nature
experiences. He believed that he sees these organisms and has these encounters because
he is looking for them and also behaving in a way that would make it more likely for him to see wildlife.

Desert Fox, like TV Idol, talked in his interview about negative experiences with other organisms:

Luckily no contact with the plants yet. That I’m trying to avoid, the poison ivy and all that, haven’t had any issues with that um . . . I don’t know I guess you could complain about the mosquitoes and stuff like that but everyone goes through that. Um . . . well I had an enormous rat chew through the straps of my backpack, that was no fun. We hiked with a guy named Mouse Trap for a while who carried mouse traps and . . . cleared out a fair amount of shelters when we were hiking with him with those things. (Desert Fox)

Desert Fox felt that it was a good thing that he had not come into contact with plants yet. He thought about plants in terms of poison ivy and other plants that would negatively affect his experience. This is different than how Fortis talked about plants in terms of looking at flowers in bloom. Desert Fox also mentioned mosquitoes and a rat as negative aspects of nature experiences. Pioneer also talked about negative experiences, especially concerning plants:

I’m actually, uh, very prone to poison ivy. Um, I did not have any outbreak until I took a week off at home. And then I got an outbreak . . . Um, my legs show the scars from poison ivy. Um, a lot of animals as well. Uh, the scars from the mosquitoes, bug bites, (inaudible), and who knows what else. (Pioneer)
Pioneer’s experiences of plants were negative because they had caused him personal harm and discomfort. He also mentioned the insects that had caused him discomfort and influenced his nature experience in a negative way. This is how Pioneer answered my question about what kinds of experiences he had had with plants and animals. His answer shows that his overall experience of plants and animals on the trail was a negative one. He did not mention any positive experiences with plants or animals after recounting this story.

Wandering Farmer’s experiences of organisms on the trail were different than Pioneer, Desert Fox, and TV Idol in that he only talked about positive experiences:

I’ve seen a lot of wildlife. Um, really taken notice of the flowers that are coming up right now. I really take notice of the ones that we don’t have at home, you know? And the kinda—that kind of thing. There’s several of ‘em that I recognize and there’s some that are new to me, you know? (Wandering Farmer)

Wandering Farmer was noticing wildlife that was both novel and familiar. He had enough nature experience to be able to identify certain varieties of plants and knew when he had encountered something that he had not seen before. He paid attention to the flowers and wanted to experience them on his hike. Freebird was surprised by the amount of wildlife he saw:

I didn’t realize how much animals would be using the trail until we, we’re up there in the snow and every size of an animal that lives in a given area seems to jump on the trail and use it. It’s a lot more efficient, and uh yeah we saw everything from rabbit tracks to bear tracks, to turkeys. Coyotes, now you’ll see a
moose on the trail from time to time. The moose we scared out of a bog just ran down the trail and off to the woods. (Freebird)

Freebird was not expecting to share his nature experience with so many other organisms. He talked about many different organisms that he came across. His experiences allowed him to see how humans and wildlife were able to share the same space. Methuselah also talked about organisms he sees on the trail:

I saw a beautiful turtle today, a yellow turtle. Yeah, I got a picture of it. I have, I saw one little bear. I see more bear in my backyard at home than out on the trail. I enjoyed the white tailed deer because I’m formerly from Michigan and that’s what we had there. But lots of little rabbits and squirrels. One black snake. No problems with reptiles at all. (Methuselah)

Since Methuselah lives in the western U.S. he sees a lot of wildlife in his everyday life. However, he was still excited to see wildlife, and when I asked him how seeing the wildlife made him feel he replied: “It’s nice, I mean that’s what you’re out there for, so.” Part of Methuselah’s enjoyment of the AT experience was seeing wildlife; this is part of his reasoning for taking long distance hikes.

Desert Fox had previously mentioned that he had a negative conception about experiences with plants, but he went on to talk about positive experiences of animals:

. . . we spotted a couple moose a while back and we’d been waiting a long time to see any wildlife because of how early we started mainly, but um that was cool because [Freebird] actually saw it first and um thought it was a rock, and that was
cool as he called me over and I was trying to call him, and he turned his head, he
heard us so that was cool. (Desert Fox)

Desert Fox reported that he had been looking forward to seeing wildlife. He wanted
wildlife to be a part of his AT experience. Getting to experience seeing an animal in
nature was meaningful and enjoyable to Desert Fox. Freebird mentioned another animal
that himself and Desert Fox had been waiting to see:

. . . we went so long without seeing a bear . . . and then we saw our first bear in
town in Plymouth, New Hampshire. It was going through the garbage of the
motel we were staying at. It was a black bear we kind of spooked back into the
woods when we walked around back. (Freebird)

Freebird wanted to see a bear, but when he finally encountered one, it was in a human
environment. Freebird had mentioned that he thought it ironic to finally be able to see a
bear by a motel. Freebird was able to experience that nature and humans often share the
same spaces, but it was unclear if Freebird came to that conclusion after having this
experience. Sparrow was also excited to see certain varieties of wildlife:

. . . as a bird nerd, anytime I can identify any bird call I get really excited. And
the first time I saw—well I heard a scarlet tanager for like days. I kept hearing it
and finally saw one and was so excited. (Sparrow)

Sparrow sought out the nature experience of seeing and hearing birds. When she was
able to have those experiences, it was a special occurrence for her.

In terms of my own AT experience, I really wanted to see wildlife. For me, seeing
wildlife, both plants and animals, is part of what makes nature experiences
meaningful. Since it rained for the first few days of my hiking experience, I did not get to see a lot of animals. When I hiked with Candy Elf and Growing Pains, we saw a whole herd of deer bounding through the woods. Even though I see deer all the time where I live, I am usually in the car or in my house. I still get excited when I see them in the context of sharing a nature space with them.

We also got to see some species of small lizard as well as a number of different wildflower species. I am very interested in herpetology and finding and identifying different species of snakes, lizards, and amphibians is a hobby of mine. I was really surprised to see a lizard since I do not really think of them in that type of habitat, so that was a very interesting and exciting find! There were also a number of unfamiliar bird calls that I heard on this section of my hike. I enjoy trying to identify birds by their calls so I love it when I can hear new bird songs.

When I did my third data collection trip in Maine, I finally got to see a moose in the wild! I unofficially keep track of the different species of animals I see in the wild and I have been waiting to see a moose. While I did hike for about half a day in Maine, I did not see a moose while hiking or while driving through some of the backcountry. Instead, I saw a cow and a bull moose while driving back and forth after dusk from my hotel to the hostel and restaurant where I was interviewing people. It was so meaningful for me to finally see those moose and I will always remember the experience.

Another nature experience I had during my data collection was driving from a part of the Appalachian Trail to a nearby town in Maine. In Maine, there
are a lot of logging roads that you can drive on to get from one town to another.

My husband and I had spent the morning hiking the AT, then decided that we
would not be able to hike fast enough to keep up with the hiker bubble that was in
the area. I decided that I would have to drive to the nearest town that the AT goes
through in order to do my interviews.

We used a GPS in order to figure out how to get to the nearest town. We
began by going down a logging road which soon progressed into a snowmobile
trail that was barely wide enough for the car and strewn with giant boulders as
well as deep trenches. Luckily our car had enough ground clearance as well as
all-wheel drive. It took us about 2 hours to make it approximately 15 miles. It
was such a great nature adventure for me and even though a lot of people would
not consider off-roading to be a nature experience, I always equate it with
memories of off-roading in the Rocky Mountains with my family to get to
backcountry campsites. I also see this as a nature experience because as we
emerged from the trail, we came out into a huge beautiful bog. It was a clear,
sunny, crisp fall day. The bog was beautiful and the water was so clear. It ran
into a nearby stream and it was a gorgeous scene. We stayed there for 45
minutes just enjoying the scenery, walking in the water, and trying to spot a
moose.

Thinking about these experiences shows me how different types of
experiences “count” for different people in terms of being a nature experience.
In addition, different experiences have different meanings and levels of
significance for different people. When I think back on my off-roading adventure, I see it as one of the best and most fun nature memories that I have with my husband. However, when I ask my husband how he thinks about it, he says that it was fun but that he does not see it in as significant a way as I do. So even two people who are experiencing the same thing at the same time will see that experience differently.

Another type of nature experience that participants had included were views of nature and looking at scenery. Fewer participants mentioned scenery or views as experiences than those who mentioned weather or other organisms. However, views seemed to be very meaningful for two of the participants who did mention them. Sparrow talked about views as a powerful nature experience:

... every time we come upon just like a view. It’s always just breathtaking. It doesn’t matter what the view is. But, anytime you can just like see the mountains, like, I just get a smile on my face, every single time. Because it just reminds me of, like, it centers me. It reminds me of why I’m here. It reminds me of why I’m hiking, it reminds me of what I believe my purpose on earth is—and it’s to preserve the majestic nature, you know? Um, and so, yeah, I think that’s, you know, that probably happens at least once a day or every other day. Um, so that’s kind of the more breathtaking, I guess, nature experience if you will. (Sparrow)

Sparrow’s experience of just seeing nature was very powerful. Having the experience of seeing nature scenery and views reminded Sparrow that she wishes to “preserve the majestic nature.” The word “majestic” suggested that Sparrow found nature to be
magnificent and worth protecting. She described seeing views as a “more breath taking” type of nature experience. Even though Sparrow talked about other experiences of nature in terms of seeing other organisms such as birds, views seemed to be a very meaningful experience for her. Sparrow’s hiking partner, Silent Spring, also thought that views of nature were a meaningful experience: “I would agree with [Sparrow]. Every time I come upon a view, it really is just like—it just hits me and I’m like, ‘Oh my god, life is so awesome, like, everything is so awesome.’” Silent Spring was impressed by views of nature whenever she saw them. The experience of seeing a view did not seem to diminish as she hiked. She went on to speak more about views:

But, it just like—it’s like wow. Like, I remember this one day we were hiking—I don’t even know where. Uh, it was just like before the Smokies or something. It was like sunset and everything was so beautiful I just wanted to break out in like hysterical tears. Like, I was just like overwhelmed with like, I don’t know. Like, appreciation for just how beautiful the world is and, um, not just like nature but everything in life itself and, um, even the struggles it like—I just, I don’t know. I just love it, love it all. And, uh, every time I’m hiking, which is every day—well every day I’m on the trail. I just like—I really get in the zone and I usually don’t talk that much. I love just like hiking and not talking and listening to everything around me. And especially like early in the morning, it’s like—just like makes me feel so alive and I just get lost in my own head and I’m thinking like, “this is so amazing, I don’t want to be doing anything else but this right now.” Just
because of like everything around me and like—like I said big picture.

Everything, all of it, I just love it. (Silent Spring)

Silent Spring was overwhelmed by the powerful experience of seeing nature vistas.

Seeing the views allowed her to see the “big picture,” which included not only nature, but “life itself.” The experience of hiking and seeing and hearing nature along the way was very powerful for Silent Spring. She did not articulate exactly what was so powerful about this experience but instead said, “I just love it.” This statement showed how meaningful nature was to Silent Spring on her thru-hike.

Two other participants also mentioned the experience of seeing views, although this experience was not as significant to them as it was to Sparrow and Silent Spring.

Two Dog talked about the change of scenery in terms of seasons:

I’ve had positive experiences from all the different environments and flora and fauna. Watching the spring bloom on the way up the trail, I guess, comes to mind. That’s an overall experience. (Two Dog)

His experience of seeing spring occur over time while hiking was a positive experience, although he did not express anything that indicated this experience was greatly significant to him. Desert Fox also talked about views in a similar manner:

. . . it’s an achievement to go up the mountain and be able to see, being on top of a mountain or a ridge. Ridge walking is probably my favorite because as you walking you still get the views, it’s a little more dangerous especially when it’s weathered but uh I just love ridge walking. (Desert Fox)
On the Appalachian Trail, the terrain usually requires hikers to go up and down in a series of many changes in elevation, but occasionally hikers can walk along the ridges of higher elevations for an extended period. Desert Fox enjoyed being able to ridge walk because this allowed him to be able to see views while he hiked instead of having to stop to take in the scenery while he was at the top of a mountain. It is apparent that seeing views was an enjoyable experience for Desert Fox and something that he looked forward to during his hiking.

One participant did talk about views being unimportant. TV Idol talked about his relative apathy toward views:

I’ve stopped taking pictures of like views and stuff . . . Like, you know, your regular views like being on like a crazy mountain top or whatever. But I don’t know, I stopped taking pictures of them because maybe I’m really not like an outdoorsy person. It doesn’t, I’m starting to realize from the way I’m answering these questions that I’m probably not. Because when I’m taking pictures of the views, I just feel like, well I should probably take a picture of this because that’s probably what you’re supposed to do. (TV Idol)

TV Idol did not seem to have the same appreciation for views as some of the other participants. He noticed them and had taken pictures of them only because he felt that he should, not because he was interested in seeing or documenting them. This showed that views were not a significant or meaningful nature experience for TV Idol. The experience of seeing views was neither negative nor positive.
Nature experiences were both positive and negative for participants. These experiences also had different meanings for different participants. Weather as a nature experience was particularly powerful for participants because it had a large impact on their everyday lives while hiking. The weather was more difficult to avoid on the trail than it is for people living in the shelter of houses and buildings. Other organisms were also prominent experiences for thru-hikers. Some participants came to the AT wanting to see wildlife during their hike. For these participants, seeing wildlife fulfilled part of their AT experience and, therefore, these nature experiences became a part of the AT. For other participants, interaction with nature was a negative experience, but still perhaps just as significant. Many participants had specific animals, such as moose, bears, and bird species, that they were purposefully looking for on their hike, so when they came into contact with these animals, it was a particularly significant experience for them. Views of nature and scenery were another nature experience that some participants mentioned. These were particularly meaningful experiences for two participants, while others just mentioned views as nature experiences they had while hiking.

In answer to the research question, thru-hikers on the AT had a number of different types of experiences. Nature experiences were a main component of many participants’ experiences on the Appalachian Trail. These experiences fell into three categories: experiences of weather, experiences of other organisms, and experiences of views or scenery. The data revealed that the AT is a place in which people can and do have nature experiences. However, these nature experiences are not always positive. For
some participants, nature experiences were a positive aspect of their overall hiking experience, whereas for others these experiences created negative memories.

Research Question 1b

What experiential learning takes place and how does it occur? Many participants thought that learning had occurred during one or more portions of the hiking experience (e.g. researching, planning, and hiking). The first theme I discuss is that there were certain types of content/subjects that participants reported learning. Secondly, many participants described the process of learning as being highly social in nature.

Emergent theme: Subjects of learning. Many participants mentioned certain subjects and content that they learned about from their experiences on the AT. These subjects are broken down into organism identification, environmentalism, science, and self. One of the more prominent subjects that participants mentioned was organism identification. Organism identification is a skill that is useful in a number of different contexts, such as being a professional or hobbyist naturalist, working in various scientific fields such as ecology, botany, mammology, herpetology, or any of the fields in which organisms are studied in their habitats, various environmental science fields, or basic hiking and outdoor survival skills.

Sparrow sharpened her birding skills while hiking the AT:

... as a bird nerd, anytime I can identify any bird call I get really excited. And the first time I saw—well I heard a scarlet tanager for like days. I kept hearing it and finally saw one and was so excited. And then someone asked me the other day, they’re like, “do you know what bird is red and has black wings?” I was
like, “yes, it’s a scarlet tanager and it’s bird call is ‘jeeper.’” And I was so excited to talk about birds, you know, like anytime I get. (Sparrow)

Learning organism identification skills requires practice. Sparrow was able to use her birding skills on the AT, which allowed her to build her birding repertoire and keep her skills sharp. She was also able to share her knowledge with others, which made her more excited about the subject. Pioneer also mentioned learning about organism identification, “. . . recently, I actually found, um—bumped into a thru-hiker that showed me some edible plants. And I’ve since been able to find and actually, um, try them. So yeah, that was pretty cool.” This revealed that hikers on the AT were learning about different subjects, including organism identification. Pioneer was able to learn a skill and practice it while hiking. Desert Fox also demonstrated that hikers were learning how to identify different organisms:

. . . I mean just growing up in the desert I knew about cactus and what not but now there’s a few trees I can point out. I don’t know, it’s cool to go to bed with some of these loons on the ponds right next to your tent going crazy, just um a lot of stuff like that I’d say end up learning about compared to, I mean compared to where you come from I guess. (Desert Fox)

Desert Fox learned to identify novel organisms that were not part of the ecosystems that he was familiar with. Since he began his hike, he learned to identify certain new tree species as well as loons. Candy Elf became more familiar with identifying edible plants, “. . . all of a sudden, you see in between a sidewalk and a curb, hey, you can eat that plant. You know, your eyes are just always open, always like looking around.” She was
excited about being able to identify these types of plants and used her new knowledge as she hiked the trail. Organism identification was a subject that a number of participants mentioned. However, no one stated that they had undertaken their AT hike with a goal to learn about different organisms or even that they had expected to learn about anything academic. Learning about organism identification emerged from the experience of hiking. This is a skill that is not unique to hiking and can be utilized in a number of different academic areas.

Another subject that participants learned about was environmentalism. This included broad concepts about environmentalism in general, as well as more specific ideas in environmental science. For example, Sparrow talked about learning that she cannot force others to become more environmental:

...it’s been really cool to just meet so many different people and to just soak in the differences of people and their views on nature. Especially because I am an outdoor educator, um, and that’s something I’m going to have to face—I’m going to have to battle all the time is that I don’t want to change anyone because I don’t want to be the reason they change. I want them to change for themselves. And so I’ve had to realize that, you know, there’s people out there that don’t want to practice LNT. And you know, I’m not perfect, I’m not the best at LNT you, it’s hard sometimes to be perfect at it, you know? Um, I do the best that I can, um, but I have to accept that, uh, not everyone is going to be ok with that and like I have to just lead by example and do my own thing. And if they’re not going to do it—you know, I can’t force them, you know, people have to want to do it on their
own. So that’s something that I’ve definitely had to learn and like real in the like crazy environmentalist. It’s like—wait no you can’t do that! It’s like, I gotta lead by example, do what I’m gonna do. (Sparrow)

During her hike, Sparrow was able to recognize that different people have different attitudes toward the environment, as well as different levels of environmentally responsible behaviors. As an outdoor educator, she might be used to having the goal of improving people’s attitudes and behaviors toward the environment. On the AT, however, she learned that she can really only control her own actions and just has to “lead by example.” She also learned that you can only do what you are capable of in terms of environmentally responsible behaviors, such as Leave No Trace (LNT). She states, “it’s hard sometimes to be perfect at it,” which revealed that she tried her best but realized that environmentally responsible behavior may never occur in its ideal form.

Another environmental idea that some participants learned was that humans can have a direct impact on the environment. This idea is often intangible and hard for some people to conceptualize, but on the AT hikers saw this occurring. Fortis talked about his experiences on the trail in terms of hikers damaging the trail environments:

I think I learned that on a small scale, just what a big impact people have on me alone in a negative way. So that makes me think of the world and when I start thinking of consumption, it’s how we consume and then the trash side of it, with what’s left after the consumption and it’s scary ‘cause there’s not that many hikers . . . I mean, I’ve looked at the damage that just a small group of people can do—and most of them really do care and then you, so you think of it from a
global standpoint and you go holy cow, we might have some for real problems here . . . So yeah, yeah. It’s definitely made me more aware and a need to be more conscientious but there definitely is some problems and if we care about the future for our children, then we probably need to make some changes probably sooner than later. (Fortis)

Fortis was able to see the damage to the environment that a small group of people using the same space can do, and he then applied this learning to a larger global context. Experiences on the trail brought Fortis to the conclusion that humans consume a lot of resources and that everything we consume produces trash. He then transferred this idea to a larger global context and came to the conclusion that humans may need to alter their behavior. Fortis learned that humans can and do impact the environment in a real and direct manner.

The concept of human consumption of resources also emerged in more personal ways for some participants. Many hikers learned that they did not require as many resources as they thought they needed originally. For example, Freebird realized that he most likely did not need as many goods as he thought:

I’d say um learning what you do and don’t need, not only on the trail but kind of in life as well, like if I can get by with this forty, fifty pounds for a year out in the middle of the woods, then probably do without a lot of other things back home. (Freebird)
After being able to “get by” with only the supplies in his backpack, Freebird learned that he might not need as much stuff in his everyday life to live and be happy. Fortis came to a similar conclusion:

I learned I can do with a lot less. Definitely can do with a lot less. I learned that old habits die hard and even if you’re not here, you continue to dry it up, to do what’s worked in the past and that’s what I, I’ve learned it’s possible to walk away from life in a difficult time and go pursue your dreams so I have a lot more dreams that I choose—that I will be pursuing. (Fortis)

It seemed as if Fortis was saying that he will try to go forward in his life by collecting experiences rather than material goods. From his hiking experience, he learned that he does not require as many material possessions as he thought. He also said that it might be hard to change these types of consumption habits, but that he is going to attempt to live his life differently after having had this experience. Fortis’ wife, Nails, had also learned that she does not need as many things in her life:

I’ve learned that I don’t need all the stuff I have in life. I’ve learned that I can live out of a backpack. Which is very difficult for me ‘cause you should see my closet. You know, I have learned though that you just don’t have to have all the stuff to be happy and that’s a big deal for me because I didn’t grow up with a lot of things. I didn’t come from a wealthy family and as I’ve you know, grown up and I’ve worked hard for the things that I’ve gotten and I don’t consider us wealthy either now but we have nice things that we worked hard to get. And they’re not necessary, you know. You feel like they’re necessary when you have
‘em—and they’re in your house and they’re your things and I think I’m probably going to get rid of a lot of stuff. (Nails)

Nails recognized that she thought material possessions to be of some importance in her life, but learned that she does not need those things to be happy. She also recognized that this would be a relatively large change for her. It seemed like she may not have had a lot of material possessions early in life, so physical things became indicators of success. After hiking the AT, however, she learned that she really does not need “all the stuff.”

Some participants also reported learning about scientific concepts. These were for the vast majority weather- and geography–oriented concepts, most likely because those are things that impact participants’ hikes. For example, Candy Elf talked about some of the things she learned while hiking:

I am a little bit of a freak about what’s around me. It’s like, I will stop, I will take a picture of a bug, I will figure out what it is. And I mean, there’s that aspect of nature, and then there’s the aspect of nature with the weather and everything and actually learning to read the clouds and everything and kind of predict the weather . . . Not like a weatherman, but you know, just putting the—I have a barometer and altimeter on this little thing my mom had gotten me for Christmas, so it’s like learning to read the barometric pressure with the altimeter is totally like, you know, it’s gonna help me read the weather... (Candy Elf)

Candy Elf talked about using tools such as a barometer and altimeter to predict the weather. This was a very good example of using science process skills. Candy Elf was
using data in order to make predictions. She also talked about identifying insects. She went on to talk more about what she learned:

In Hot Springs I was really sick with a cold, I sat there, I looked through the book and, you know, read about all the pollution. It’s like you get to the top of a mountain, this is so beautiful, when in reality, it’s pollution that has—has these trees dead. So now these trees are dead, but we still look at it in beauty because it’s something we’ve never seen. But we’re the ones that did it. So you know, I kind of learned that about it. (Candy Elf)

Candy Elf also learned about how pollution can impact trees. Interestingly, she was negotiating between the beautiful view that resulted from this pollution and the realization that pollution killed the trees.

Pioneer mentioned a number of scientific concepts that he learned from his hike:

“I have learned a lot scientifically. Um, I learned about the weather, uh, geography, uh, geographically looking at topography. Um, what the, uh, ground conditions are gonna be by the topography.” He mentioned weather and geography as subjects that he learned about. Desert Fox also talked about a number of science concepts:

I mean I’m sure there’s something out there I’ve learned scientifically. Starting fires was probably a big one. Scientific I mean probably not from a scholastic standpoint or something, but yeah I don’t know . . . the little things that um . . . I don’t know, we certainly learned burning petroleum based fuel puts too much soot on everything, and I couldn’t break that down chemically but . . . I’d say go for alcohol of some sort . . . alcohol is the best. (Desert Fox)
From his hiking experience, Desert Fox learned about how different types of fuel burn more cleanly than others. He also mentioned that learning how to start a fire was scientific. I am not sure which element of the process Desert Fox thought was scientific about fire starting, but he saw this as a science concept.

Some participants talked about learning about themselves as something that occurred while hiking. Sparrow learned that she needs to take care of herself as well as take care of others:

This in my nature it’s just to always kind of like take care of people and people always call me mama [name redacted] and, you know, and I’m like a wilderness first responder so I even more, you know, like I feel more of a need to take care of people or whatever. And so sometimes I forget to take care of myself. That’s one of the reasons that I’m out here, you know, I want to find that balance and—so one day I finally was just like I need to take a solo hike and I did and I went over Max Patch in Tennessee by myself and it was like so beautiful. I got a lot of thinking and I got to just go through all those emotions. I got to see beautiful views and take them in by myself. I love being with people but sometimes you just need that. So, it was really empowering to be able to take that control and be like I’m just going to go do this because I need to and I can. So that was pretty awesome. (Sparrow)

Sparrow learned that it is acceptable to care about yourself sometimes. This realization helped her to feel empowered to take control of what she wants to do and when. Candy Elf also learned about herself on her hike:
. . . being able to kinda figure out who you are. You’re becoming more comfortable with yourself, which in turn makes you more comfortable with others. So, you have that. And then you just have everything around you. You’re constantly learning, whether it be about yourself, whether it be about others, whether it be about the respect for Mother Nature and everything. It’s, it’s a constant battle—I don’t know if it’s a battle, but it’s a constant learning process where it’s gratifying. Whether or not it’s learning from experience or learning from others, it’s very gratifying. (Candy Elf)

Candy Elf saw the process of hiking as being a constant learning experience. She was able to learn about a number of different subjects, including herself. Learning more about herself allowed her to be comfortable in her own skin and, therefore, be more comfortable with others.

In answer to the research question, learning on the AT encompassed a number of different subjects, including organism identification, environmentalism, science, and self. A lot of participants mentioned learning about identifying different organisms such as wild edibles, trees, plants, and birds. Participants conceptualized learning about environmentalism in broad ways, but also in personal ways involving consumption of resources. They learned about themselves through self-reflection.

**Emergent theme: Social learning.** Almost all of the participants thought that learning had occurred during one or more portions of their hiking experience (e.g. researching, planning, or hiking). This learning occurred in specific and unique ways. One theme that emerged from the data was that learning on the AT was highly social in
nature. Participants expressed that learning on the trail was different than learning in more formal environments in a number of ways. For example, Liege said that “school stops eventually but learning never does.” This statement in particular reveals how learning is not explicitly tied to formal learning environments. Participants indicated that learning on the trail was contextual and social.

Just as the social aspect of the thru-hike experience was very prevalent and significant to participants, learning on the trail also had a large social aspect. Thru-hikers share the lived experience of hiking the Appalachian Trail and learn together on the trail as they hike. However, this learning is not necessarily intentional. None of the participants stated that a reason they chose to thru-hike the AT was to learn about any subject in particular, other than to reflect on their life or self. Despite this reality, participants frequently described learning that took place as they lived this experience. This learning took place predominantly in social situations, where a participant was with another person or a group of people. This theme of social learning is discussed below.

The hiker community shares enthusiasm for the experience of thru-hiking as well as dedication to other members of this social group. The actors in this group then learn together about the experience of hiking as they interact during the experience. For some hikers, the social learning aspect of this community began even before their actual hike. TV Idol mentioned how blogs of past thru-hikers “helped immensely” in planning his thru-hike:

... they would like show their gear and what not. I followed this blog by this guy who did it last year, and he went by the name of Patchy, and I pretty much
just like based all my gear off of, in the beginning, off of everything he has, and
I’ve only like switched out like a couple of things. I mean, yeah, everything that I
. . . it really helped, like, and I all I did was like watch blogs, I mean, and I have
like a really light weight pack. It’s probably like, usually it’s probably like
twenty, like nineteen pounds. (TV Idol)

TV Idol reported here that past thru-hikers are still a part of the AT community and
contribute to the social learning that takes place within this community. TV Idol used
information provided by this past thru-hiker to plan his hike and purchase his
backpacking gear. Instead of basing his gear choices on personal experience, he based it
on this other person’s previous experiences on the AT. He learned about hiking gear in a
social way.

Similar to TV Idol’s mention of blogs, Fortis mentioned online forums when
planning for his hike: “Well I planned by using forums like Whiteblaze.net, different
forums on Facebook, a lot of reading and just by past hiking experience.” Fortis used a
combination of past personal experience and social learning from hiking forums to plan
his AT hike. Darjeeling also used online resources from past hikers to plan his hike. He
said, “I spent a lot of time researching online. There are a few websites that I went to that
had gear lists, uh, rough travel schedules, you know, what towns you’d hit.” These types
of resources are created and compiled by a community of hikers and backpackers.
Darjeeling used these community resources and was learning from this community of
hikers how to prepare for his hike. There were also a number of participants who spoke
with previous thru-hikers that they either knew or sought out in order to learn how to
prepare for this experience. When asked about how she planned for her hike, Sparrow explained that she had “. . . talked to [her] friend a little bit about it who hiked in 2011 . . . I was kind of dating someone who had thru-hiked the trail in 2010, and he would tell me stories all the time.” These excerpts support the finding that thru-hikers were not only using social means to learn about hiking the AT, but they were also becoming novice members of the hiker community.

Many participants also learned on the trail itself. Candy Elf revealed how this social learning took place:

You know, it’s kinda fun just like walking down a road, it’s like—all of a sudden, you see in between a sidewalk and a curb, hey, you can eat that plant. You know, your eyes are just always open, always like looking around. Because I mean, maybe it’s because we’re so observant out here, but you notice things a lot more. And it’s like fun what you’ve learned, being able to teach other people and tell other people. (Candy Elf)

Candy Elf reported that it was enjoyable to learn different skills on the trail and then to share that information with others. Sparrow echoed these thoughts:

I love learning from other people and just every single person has so much to offer, like, that you can learn from. So, it’s been really cool. Like, I’ve been hiking with Sea Biscuit for like two weeks now ahead of these guys. And, uh, he’s really knowledgeable about like science and nature so—and like we both kind of learn from each other. Like, he knows some plants that I don’t know and like I know some that he doesn’t know so it’s been super fun and, um, he knows a
lot about animals and I’m more of like a plant person. So, like it’s really cool to
just like share and like, you know, share knowledge. (Sparrow)

Sparrow revealed that each hiker has certain skills that they can be considered
dnowledgeable about. Each person can then share their unique skills with others to form
a learning community. In this community, hikers share knowledge with each other and
are able to increase or improve their own skill sets.

In answer to the research question, learning on the trail was very social. The
Appalachian Trail is already composed of a social community, and this extends into the
sharing of knowledge throughout that community. As hikers began their hike, novice
members of the group learned from group members who had more expertise. As hikers
experience more of the trail, they develop their own skills, which can be shared with
others.

Research Question 2

What significant life experiences, formative influences, and reasoning led
participants to undertake an intense nature experience? Thru-hiking the Appalachian
Trail is a four to six month commitment, and involves at least some pre-planning. Thru-
hikers on the AT live their daily lives mostly in the outdoors and are exposed to the
elements and weather. Some people might find that kind of experience daunting or
unpleasant. This is not an experience that everyone would choose to do. Making the
choice to thru-hike the AT is therefore a decision that reveals elements of a person’s
identity, comfort in the outdoors, and connection to nature or the outdoors. From my
participants, I found that there were many reasons for choosing to undertake this intense
nature experience, as well as different life paths that led people to the AT. However, there were also many commonalities among participants. In my conversations with participants about the paths that brought them to the AT and the thru-hiking experience, they highlighted significant life experiences (see Tanner, 1980) and formative influences as part of their reasons for hiking the AT.

**Emergent theme: Significant life experiences.** Significant life experiences (SLEs) are outdoor and/or nature experiences that people recall and reflect on as being significant in some way. There were many significant life experiences that came up in conversation with participants. It is important to note that participants considered these experiences significant enough to bring them up of their own accord. Even though I personally would not have thought of some of the experiences as nature/outdoor experiences, the participants themselves connected these experiences to the outdoors, nature, or reasons for wanting to hike the AT. Table 4 shows all of the SLE’s that participants mentioned, as well as the participants who mentioned them. The purpose of the table is to show the specific activities that participants talked about and to show that many of these activities co-occur. However, it is important to note that this table is not being used to quantify how many participants mentioned each event.

The SLEs listed in Table 4 are not significant in and of themselves. These were events that participants brought up when I inquired about nature/outdoor experiences that they had had before beginning their hike. Some participants related certain experiences as being more significant than others, while other participants felt that those same experiences were not that meaningful to them. For example, the SLE of camping meant
different things to different people. TV Idol mentioned camping when I asked him about prior outdoor experiences, but he talked about it in a way that indicated that this was not a meaningful nature experience. He mentioned camping in the context of Cub Scouts:

The Cub Scout trips were, they were laughable like, it was basically just like set up like all the Cub Scout troops and dens or whatever would set up like a huge tent, like, huge campsites and, and we would just like feast basically . . . it was just camping. It was just really luxury camping, and I don’t really merit that to like any kind of learning experience. (TV Idol)

When I asked if there was anything about this nature experience that stayed with him, he said, “No, not really.” The experience of camping was significant enough to recall the memory and mention it, however, TV Idol did not talk about it as a personally meaningful nature experience. Desert Fox saw his camping experience in a more positive light: “I did a lot of camping as a younger kid too, well not a lot but enough to spark my interest. Outdoors has always been my thing, just didn’t get enough of it in the city by far.” Desert Fox’s experience of camping influenced his interest in nature/outdoor activities. It is something he saw as positive and perhaps something that inspired him to do more nature-oriented activities. He thought back on the experience with good feelings. His experience of camping was quite different from TV Idol’s experience of camping, yet they both mention camping as an outdoor experience they had as children. I counted both mentions as a significant life experience for two reasons. First, SLE’s can be positive or negative experiences. Second, I interpreted any activity that a participant mentioned as significant, since the participants were free to talk about anything and the
choice of stories and examples they shared indicated that the stories were significant in some way as memories.

Visiting or vacationing to outdoor/nature places was mentioned by a few participants as a significant life experience. Some participants mentioned going out west or visiting the western states when I inquired about their SLEs and previous nature experiences. Even though there are a number of “nature” or “outdoor” areas to visit in the East and Midwest, “out west” seemed to be a representation of nature in the minds of some participants. As the researcher, I found this interesting because I tend to share that same bias. Silent Spring revealed that “out west” is sometimes considered more wilderness-oriented than the eastern U.S.:

. . . the AT is very, to me it’s very social because I just have been, um, out in the wilderness and the—out west so much recently, um, that it’s like, it’s basically, it feels like I’m walking through people’s back yards because we’re so close to towns and stuff and we do and we cross roads and it’s like, whoa we’re not in the wilderness to me. Um, so it’s just kind of like an adventure, like physically and it’s like, um, exhilarating for me to just like be out in the woods even though I’m not like, you know, a hundred miles from a town or something. I’m still like seeing beautiful views and I also am finding beauty in like coming into towns and like learning about new places (Silent Spring)

Silent Spring felt that the Appalachian Trail was not as much of a wilderness as the nature areas that could be found out west, since it was not as remote. The AT’s
proximity to humans made it less of a nature space than an area that is more removed from the influence of people. She goes on to say:

... a lot of my friends say, oh, I’m too hard on the East Coast because I’m always complaining about it, and I’m like oh I love the West Coast so much better and blah, blah, blah. But yeah, so I thought it’d be a good way to show some appreciate for the East Coast and actually see it so I can like justify what I’m saying about it instead of like ah the whole coast is just like blah. (Silent Spring)

Silent Spring felt that the West Coast was better than the East Coast. Part of her reasoning for this was that she felt that, for her, the quality of nature spaces in the western part of the country is higher than the quality of the nature spaces in the eastern part of the country. Interestingly, Silent Spring grew up on the East Coast and then moved out west in her adulthood.

Even though the SLE of visiting nature spaces and going “out west” was not one of the most prominent activities participants mentioned, I wanted to pull it out because it was interesting to me personally. Even though I live in the Midwest and have been to a number of nature spaces in the Midwest and the East of the U.S., I still always feel drawn to “out west.” When I think about nature, in my mind I am imagining the Rocky Mountains and their surrounding areas. I am thinking about Yellowstone and the Grand Tetons. For me, the idea of a nature space seems to be tied to this region. Perhaps it is because I have family in Colorado and have positive memories of backcountry camping and hiking in the Rockies. Alternatively, it could be that I see the west as rugged, or as an untamed
When I am out west, I feel like my nature experiences are more authentic, more wild, and more deeply nature oriented. I am biased toward the idea of wilderness when I think about nature. In addition, part of my personal definition of nature is that the space is either far away from humans or not highly manipulated by humans. What does this mean for more urban nature areas? What does this mean for areas that are not “wilderness?” I will be discussing these ideas more in terms of participant’s conceptions to nature, but I thought it important to talk a bit about my own bias as it emerged during analysis of data. (Klein, 2015)

Table 4

Significant Life Experiences

<table>
<thead>
<tr>
<th>Time in Life When SLE Occurred</th>
<th>Outdoor / Nature Activity (SLE codes)</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Participants names are highlighted according to the type of environment they lived in for the majority of their childhood. u = urban; s = suburban; r = rural</em></td>
<td><em>Playing Outside (includes bike riding, skateboarding, playing sports, climbing trees, playing with friends)</em></td>
<td>TV Idol (u,s), Darjeeling (s), Growing Pains (u,s), Wandering Farmer (r), Candy Elf (r), Liege (r), Sparrow (u,r), Silent Spring (r), Two Dog (s), Pioneer (s), Methuselah (r), Desert Fox (u), Freebird (u), Goodwill (r,u), Hündchen (r,s), Fraulein Fertzig (r,s)</td>
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<tr>
<td>Childhood (approximately 0 -16 years)</td>
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<tr>
<td>Camping</td>
<td></td>
<td>TV Idol (u,s), Darjeeling (s), Candy Elf (r), Sparrow (u,r), Silent Spring (r), Desert Fox (u), Fraulein Fertzig (r,s)</td>
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<tr>
<td>Hiking</td>
<td></td>
<td>Darjeeling (s), Candy Elf (r), Sparrow (u,r), Silent Spring (r), Two Dog (s), Hündchen (r,s), Fraulein Fertzig (r,s)</td>
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<tr>
<td>Activity</td>
<td>Young Adult / College Age (approximately 17 – 21 years)</td>
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<tr>
<td>Backpacking</td>
<td>Darjeeling (s), Silent Spring (r), Pioneer (s), Goodwill (r,u)</td>
<td></td>
</tr>
<tr>
<td>Hunting/Fishing</td>
<td>Wandering Farmer (r), Two Dog (s)</td>
<td></td>
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<tr>
<td>Scouts</td>
<td>TV Idol (u,s), Candy Elf (r), Two Dog (s)</td>
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<tr>
<td>Gardening</td>
<td>Wandering Farmer (r), Pioneer (s)</td>
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<tr>
<td>Working on a Farm</td>
<td>Wandering Farmer (r), Methuselah (r), Goodwill (r,u)</td>
<td></td>
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<tr>
<td>Playing in the Woods</td>
<td>Darjeeling (s), Liege (r), Silent Spring (r), Two Dog (s)</td>
<td></td>
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<tr>
<td>Kayaking/Canoeing</td>
<td>Sparrow (u,r)</td>
<td></td>
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<tr>
<td>Rock Climbing</td>
<td>Sparrow (u,r)</td>
<td></td>
</tr>
<tr>
<td>Visiting or Vacationing to Outdoor/Nature Places</td>
<td>Candy Elf (r), Silent Spring (r), Pioneer (s)</td>
<td></td>
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<tr>
<td>Swimming</td>
<td>King (r), Two Dog (s), Pioneer (s)</td>
<td></td>
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<tr>
<td>Going to a Park</td>
<td>Sparrow (u,r)</td>
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</tr>
<tr>
<td>Working Outdoors (includes outdoor summer camp, lifeguard, swim instructor)</td>
<td>King (r)</td>
<td></td>
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<table>
<thead>
<tr>
<th>Activity</th>
<th>Young Adult / College Age (approximately 17 – 21 years)</th>
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<tbody>
<tr>
<td>Hiking</td>
<td>Darjeeling (s), Growing Pains (u,s), Candy Elf (r), Sparrow (u,r), Silent Spring (r), Methuselah (r), Hündchen (r,s)</td>
</tr>
<tr>
<td>Camping</td>
<td>Darjeeling (s), Sparrow (u,r)</td>
</tr>
<tr>
<td>Backpacking</td>
<td>Darjeeling (s), Sparrow (u,r), Goodwill (r,u)</td>
</tr>
<tr>
<td>Cycling</td>
<td>TV Idol (u,s)</td>
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<tr>
<td>Trail Running</td>
<td>TV Idol (u,s)</td>
</tr>
<tr>
<td>Hunting/Fishing</td>
<td>Wandering Farmer (r), Two Dog (s)</td>
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<tr>
<td>Spending Time Outdoors (includes military reenactments)</td>
<td>Pioneer (s)</td>
</tr>
<tr>
<td>Rock Climbing</td>
<td>Sparrow (u,r), Goodwill (u,r)</td>
</tr>
<tr>
<td>Mountain Biking</td>
<td>Goodwill (u,r)</td>
</tr>
<tr>
<td>Snowboarding</td>
<td>Candy Elf (r)</td>
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<tr>
<td>Outdoor/Survival Skills Classes</td>
<td>Candy Elf (r)</td>
</tr>
<tr>
<td>Visiting or Vacationing to</td>
<td>Wandering Farmer (r), Candy Elf</td>
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<tr>
<td>Category</td>
<td>Examples</td>
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<td>----------------------------------------------</td>
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<tr>
<td>Outdoor/Nature Places</td>
<td>(r), Sparrow (u,r)</td>
</tr>
<tr>
<td>Working Outdoors (includes bike messenger, outdoor summer camp, environmental education)</td>
<td>TV Idol (u,s), Liege (r), Sparrow (u,r), Silent Spring (r), Two Dog (s)</td>
</tr>
<tr>
<td>Working on a Farm</td>
<td>Wandering Farmer (r), Methuselah (r)</td>
</tr>
<tr>
<td>College Environmental Science Courses / Degree</td>
<td>Sparrow (u,r), Silent Spring (r)</td>
</tr>
<tr>
<td>Adult / Later in Life (approximately 22 years and over)</td>
<td>Hiking, Growing Pains (u,s), Wandering Farmer (r), Sparrow (u,r), Silent Spring (r), Methuselah (r), Desert Fox (u), Freebird (u)</td>
</tr>
<tr>
<td></td>
<td>Backpacking, Sparrow (u,r), Methuselah (r)</td>
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<tr>
<td></td>
<td>Ultra Running, Methuselah (r)</td>
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<td></td>
<td>Hunting/Fishing, Wandering Farmer (r), Two Dog (s)</td>
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<td></td>
<td>Working on a Farm, Wandering Farmer (r)</td>
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<td></td>
<td>Working Outdoors (includes construction, dog walker, environmental education, park ranger), King (r), Sparrow (u,r), Silent Spring (r), Two Dog (s)</td>
</tr>
<tr>
<td></td>
<td>Visiting or Vacationing to Outdoor/Nature Places, Wandering Farmer (r), Desert Fox (u), Freebird (u)</td>
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As shown in Table 4, the experiences were further divided into categories of when the SLE occurred during the life of the participant. I constructed these categories after seeing that participants mostly talked about SLE’s in terms of childhood years, young adult years, and recent years (if they were older). These categories also made it possible to look specifically at childhood nature experiences, which, according to the literature, are thought to be of importance in adult environmentalism. A number of participants were either not over the age of 21 or were very close to that age, so the data on SLEs that occur later in life (22 years of age and over) was limited in this particular study.
Childhood experiences in the outdoors and in nature was a unifying code for participants. Every participant mentioned that they had spent time in the outdoors as a child, with one exception. The specific activities and experiences that participants took part in ranged from simply playing outdoors to more intense interaction with the outdoors such as camping, hiking, and backpacking. Goodwill described some of his childhood outdoor activities during the interview:

. . . my grandmother and grandfather had a farm in Chestnut Hills, Tennessee, that I would go to during the summer. So, when my parents were working and I was a young man or young boy, they would take me there . . . You know, if it was a nice day like when I didn’t have school, my parents would lock me out of the house, you know, and like make, make me play outside. And you know, that was, that was always cool. Me and like my cousins, we’re all real close and we would always just play outside. (Goodwill)

Goodwill talked about playing on his grandparent’s farm, and playing outside with his cousins. Hündchen described hiking in the Alps as a child, “So we have the Alps in Switzerland, I have to say that. So, I often went with my parents hiking when I was a child and I often went into the forest and we played games with other kids.” Fraulein Fertzig mentioned the Swiss equivalent of Girl Scouts, and activities with her family: “We did with my family, every time hike holidays and skiing holidays, and also in the, we call it something else, the girl, girl scouts.” When I asked about childhood outdoor activities, Growing Pains said, “you know, climbing trees and whenever I could and had the chance. Uh, I liked playing sports, I was very into sports. So yeah, I was, I was
outdoors whenever I had the chance.” As shown in these examples, there was a lot of variety in the ways that participants spent time outdoors as children. However, all participants except one described a significant amount of time spent outdoors as a child in some way.

Many participants indicated that most or all of their childhood free-time was spent outdoors, whereas others said that their time as children was a mix of indoors and outdoors. Table 5 shows the reported proportion of time spent outdoors as a child for each participant. Only one participant spent a majority of their time indoors and that was Nails. Interestingly, Nails related to me that she would never have chosen to hike the AT on her own, but was hiking with and because of her husband, Fortis (another participant). I asked Nails why she was hiking the AT, and she replied:

Because my husband asked me to come and, and I wanted to come actually. But I was on the fence for about six months . . . so you know, but I, I wanted the adventure. I mean, he’s so adventurous and is always doing you know, those kind of things and I thought yeah, we’ll try it so he asked and I finally said yes. (Nails)

When I asked Nails if she had ever had any personal aspirations of doing something like hiking the AT, she replied, “No ma’am. Which is kind of crazy!” Setting this negative case against the other participants helped to show that outdoor experiences as a child are an important and potentially imperative element of peoples’ journeys toward undertaking an intense outdoor experience. Everyone who was hiking the AT as a personal choice had spent time outside as a child; whereas Nails spent the majority of her childhood indoors and was not hiking the AT because she personally wanted to.
Table 5

**Childhood Time Spent Outdoors**

<table>
<thead>
<tr>
<th>Proportion of Childhood Time Spent Outdoors</th>
<th>Participants</th>
<th>Representative Quotations</th>
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<tbody>
<tr>
<td><strong>All / Majority</strong></td>
<td>TV Idol(u,s), Growing Pains(u,s), Wandering Farmer(r), Candy Elf(r), Sparrow(u,r), Silent Spring(r), Two Dog(s), Fraulein Fertzig(r), Hündchen (r), Pioneer(s), Methuselah(r), Fortis(u,r), Desert Fox(u), Freebird(u)</td>
<td>“I was outdoors whenever I had the chance.” – Growing Pains “Outdoors. Constant, nonstop, other than really, really bad weather, we’d be outside.” – Wandering Farmer “I was always outside. I have an older sister and we would just like go outside and play in our yard or the woods around our house. We’d just like take our dogs and go outside for days.” – Silent Spring “When I was a kid I was- every time outside playing.” – Hündchen “Definitely outdoors, without a doubt.” – Fortis</td>
</tr>
<tr>
<td><strong>Mix of Outdoors &amp; Indoors</strong></td>
<td>Darjeeling(s), Liege(r), Goodwill(r,u)</td>
<td>“I’d always spend a lot of time outdoors with my friends just, uh, you know, being kids in the woods. But I spent time indoors. So it was probably- probably a good mix.” – Darjeeling “I spent a lot of time outdoors in elementary and middle school: bike-riding, playing in the woods, and then towards high school I kind of became more of a computer nerd actually. So, I spent a lot of time indoors playing games with my friends, and then through college I started getting back into the outdoor scene.” - Liege</td>
</tr>
<tr>
<td><strong>Less Outdoors, More Indoors</strong></td>
<td>Nails(r)</td>
<td>“I would say indoors.” - Nails</td>
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</table>
In relation to SLEs and childhood time spent outdoors, I also looked at the types of environments that participants lived in. Participants lived in various environments as children. These environments were broken down into three categories: urban, suburban, and rural. As shown above in Table 5, all three environments were represented, with some participants having lived in multiple environments as children. Interestingly, childhood environment did not seem to influence how much time participants spent outside as children. One might think that children growing up in an urban environment might tend to spend less time outdoors than children growing up in rural environments, but this did not seem to be the case. TV Idol, Growing Pains, Sparrow, Fortis, Desert Fox, and Freebird all grew up in urban environments for a proportion of their childhood and all said that they spent the majority of their time outdoors, whereas Liege, Goodwill, and Nails grew up in rural environments and did not spend as much time outdoors as children.

As participants moved beyond childhood, many kept in contact with nature and the outdoors through outdoor activities. For example, Sparrow mentioned many outdoor activities that she participated in after childhood, whereas Desert Fox and Freebird did not mention any SLEs that took place in their early adult lives. There did not seem to be any connection between type of childhood environment and type of SLE activity, however, many of the participants who kept doing nature/outdoor activities in adulthood seemed to grow up in rural environments as children. This could be because children growing up in rural environments find nature spaces to be a nostalgic reminder of their childhood. They may also be more comfortable in nature spaces, or have more everyday
experiences with nature spaces, which made nature a special place to them. However, it is hard to draw any conclusions from this, since a number of participants were not represented in the 22 years and over SLE category because they were younger than 22 or barely over 22 years of age.

In answer to the research question, thru-hikers on the Appalachian Trail all had significant contact with the outdoors as children, with one exception. Spending time outside as children seemed to be an important factor in choosing to undertake an intense nature experience. All the participants who had played outside as children chose to hike the Appalachian Trail, whereas the one participant who spent little time outside in her youth did not have a personal interest in hiking the trail. Most participants also mentioned a number of other outdoor and nature activities that they had experienced before undertaking their hike. Having nature experiences in the past might have influenced participants’ decisions to hike the AT by making them more comfortable with or sympathetic to nature and the outdoors.

**Emergent theme: Formative influences.** One of the themes that emerged in terms of formative influences was how different people influenced participants to decide to undertake the hike. The types of people that were important influences on participants were family members, peers, and friends of the family. A number of participants talked about family members influencing them to undertake this experience. TV Idol told me about his grandfather’s influence:

This is probably something my grandpa would want to do. Oh, actually, yeah, probably, the only kinds of woodsy experiences that I’ve had were like with my
grandpa, but I was like four years old. Like, he died when I was fifteen, and yeah, he was a really outdoorsy guy. So, maybe vicariously I’m trying to like tap back into my childhood. And, you know, back to like those memories . . . we would just go like into some woods . . . and we would just walk for like a little bit. (TV Idol)

Interestingly, TV Idol talked about his experience with his grandfather as “woodsy,” which contradicted some of his other assertions that his hike was not a nature experience. He had these nature experiences with his grandfather and he credits this as something that influenced him to hike the Appalachian Trail.

When I asked Darjeeling why he was hiking the AT, he told me:

I wanted the adventure of a lifetime. Uh, I’ve been backpacking for a significant portion of my life before. Uh, my uncle and dad and grandpa were all backpackers. A family friend thru-hiked, which is kind of something that’s always been in my mind and I figure this is the time to do it. (Darjeeling)

Darjeeling mentioned three family members, his uncle, father, and his grandfather. He also mentioned a family friend. He mentioned that he backpacks currently and that he backpacks because of the influence of these people. I asked him a little later in the interview if there were any past influences that he credits for inspiring him to take this AT hike and he replied:

Um, definitely, uh, my dad for introducing me to backpacking, that was a big one. My Uncle Bob was gonna try to thru-hike last year but he did the Long Trail in Vermont . . . So those two. Definitely my grandpa who likes to hike and
backpack...And I’ve got a family friend, Russell Audie, he was my dad’s and uncle’s scout leader and my grandpa’s good friend for a long time. And he thru-hiked in ’87, I think. And was late 60’s, early 70’s and he did it. So that was a pretty—I was pretty impressed that an old man could do it. (Darjeeling)

He again mentioned these male influences of father, grandfather, uncle, and a family friend. He even credited them as one of the most significant reasons that he decided to hike the trail.

It was very interesting that when participants mentioned family members, they were almost always male. Even female participants who mentioned family members talked about male family members or male friends of the family having influenced them. Sparrow and Silent Spring interviewed together and had been childhood friends, so they had some common influences that they talked about. When I asked Sparrow how she had gotten her trail name, she said “So, [Sparrow] actually was a name given to me by my dad when I was younger. And this is a pretty sentimental journey for both of us. I’m sharing it with him as I go, so.” Sparrow was sharing her experience with her father and Sparrow’s hiking experience was meaningful to both her and her father. Sparrow also mentioned Silent Spring’s father when I asked why she was hiking the AT:

... it was kind of her, [Silent Spring’s], dad that kind of inspired this in me. I think years before, but he had done a lot of treks through like Thailand I feel and like Nepal... And I remember this one time he was telling us about a trek where he just went from like monastery to monastery. And it just sounded so relaxing, so healing, and so meditative, and it inspired me to want to do a trek similar to
that, and I picked the AT because it’s so much about the community of people on
the trail. (Sparrow)

Sparrow was influenced and inspired by both her own father and by Silent Spring’s
father. Sparrow talked about Silent Spring’s father hiking in Thailand and Nepal and
how this inspired her to undertake a similar hike.

It was interesting how many participants mentioned male influences and how few
mentioned female influences. Even Sparrow, a woman, mentioned male influences. The
only people who mentioned women or mothers as influences were Freebird and Liege.
Lierge mentioned that his mother influenced him to live an environmental lifestyle, but
did not say that she influenced or inspired him to hike the AT. Freebird’s mother died of
cancer a few years before his hike, and he was hiking in her memory:

. . . just going back to my mom she passed away of, um, she had breast cancer a
few years ago and she was already part of my inspiration you know? Once she
passed away I knew I kind of had to keep that spirit up within myself and . . .
definitely use that. I thought about her a lot out here. (Freebird)

Freebird was the only participant that credited a woman as directly inspiring him to hike
the AT. This seemed to reveal a lack of formative influences involving females and
mothers. This disparity between male formative influences and female formative
influences may indicate that nature activities are seen as male-centric activities. This
might also be part of the reason why there are fewer females than males on the
Appalachian Trail.
In summary, people played key roles as formative influences on some participants’ desires to undertake a long distance hike. These were often family members, friends of the family, or peers. Most of the formative influences mentioned by participants were male. Even female hikers talked about male influences. This may be a result of nature activities and outdoor activities being more male-oriented, or because being “outdoorsy” is more socially acceptable for males, therefore resulting in more males in outdoor experiences.

Another formative influence that led some participants to the Appalachian Trail was media. Different books and documentaries were mentioned by participants as having influenced or inspired their decision to hike the Appalachian Trail. Many participants read a book about through hiking the AT called *AWOL on the Appalachian Trail* by David Miller (2006). Wandering Farmer cited this book as one of his past influences:

> I would say probably books, ‘cause I’ve read Awol’s book. I have a lot of the books and I’ve read a lot of the books on the AT. Um, and I don’t know which came first, knowing of the AT or reading the books. I don’t remember.

(Wandering Farmer)

“Awol” was David Miller’s trail name (Miller, 2006). It was apparent that books on the AT were one of the significant influences that brought Wandering Farmer to his AT experience. Darjeeling read Miller’s book, as well as another popular book about the Appalachian Trail. When I asked him about some of his preparation for his hike he said “I read Awol’s book, Bill Bryson’s book, and uh, the book written by a 2011 thru-hiker about, you know, just what the trail’s like.” Even though Darjeeling talked about these
books in terms of his hiking preparation, they may have helped him to make the final
decision to undertake a thru-hike of the AT. Darjeeling also mentioned reading another
popular book about the Appalachian Trail called *A Walk in the Woods: Rediscovering
America on the Appalachian Trail* by Bill Bryson. Sparrow also mentioned the Bryson
book as an influence on her: “My dad definitely sparked an interest and he loved the Bill
Bryson book, *A Walk in the Woods*, and we talk about it all the time.” The book was
something that her father and she could discuss, which made her interested in the
Appalachian Trail.

Although the Miller book and the Bryson book are specifically about thru-hiking
the AT, there were other books that influenced some participants. Fortis mentioned
readings that inspired him as a child:

I was in sixth grade but I read about the Appalachian Trail and I think I read it
more from a history—from the building of the trail standpoint. It was more
educational and I read about the founders and how it was created and I think that
sparked my interest. (Fortis)

He did not mention the specific book or books that he read, however, he remembered that
they were about the history and creation of the Appalachian Trail. Learning about the
trail started Fortis’ interest in the AT. Desert Fox talked about books that were not about
the Appalachian Trail but influenced his decision to hike in other ways:

...as a kid I read...uh...into the...not into the, but Call of the Wild...

And uh White Fang was like my favorite. And uh I wouldn’t say it had a direct
influence but it definitely inspired me as far as nature’s concerned and trees you know? (Desert Fox)

These books about nature and the outdoors did not directly influence Desert Fox to undertake his AT thru-hike, but they influenced his interest in nature. This interest in nature might have then influenced his decision to experience a thru-hike.

Some participants were influenced by other types of printed material, such as magazines and pamphlets. Darjeeling read an article in a backpacking magazine:

I was in the bathroom of my college dorm reading a backpacker magazine and I remember reading about—it was Chinese backpackers who had come to hike a section of the Appalachian Trail and they’re at the Fontana Hilton. And I remember reading that and just thinking ‘cause it was junior year of college and thinking, you know, I could actually do this after school. Like this is not just some pipe-dream that, you know, I’ve talked about every once in a while. And that was probably when I actually realized—that’s when I got hit with the real bug . . . And just, I just couldn’t stop reading about the Appalachian Trail after that.

(Darjeeling)

Reading about other AT hikers in this magazine helped Darjeeling to see that thru-hiking the Appalachian Trail was an accessible experience for him. This article made the “pipe-dream” a more concrete goal for Darjeeling. He then continued to become more knowledgeable about the trail by reading more about it. This continued reading brought him closer to actually realizing his hiking goal.
Another hiker, Growing Pains, was also inspired by non-book texts. In her case, it was brochures:

I actually picked up—I think it’s like—it says the Appalachian Trail and it’s a big 'ole brochure or pamphlet. And I took it home with me and I looked and I was like, wow, this is—this is crazy, I can’t believe that there’s a path like this long. And I kept it and I actually still have it with me. And I kept it and I always said like, oh, this would be something I would love to do, not realizing that I would actually just get up and do it one day. (Growing Pains)

Growing Pains was explaining that when she first became interested in hiking she would peruse the camping, hiking, and outdoor goods stores, which is where she picked up this brochure on the AT. Finding out that there was one continuous hiking trail over 2000 miles sparked an interest in Growing Pains. The pamphlet inspired her to one day undertake a long distance hike. The pamphlet was an important factor in her decision to hike, since she has kept the pamphlet with her during her experience.

Some participants also mentioned visual media as being influential in bringing them to the Appalachian Trail. The types of visual media mentioned were video documentaries and photographs. TV Idol saw a documentary about the AT as a child:

When I was like in the middle of high school, probably junior year, I saw, I came across a PBS documentary on the AT which, um . . . I think it was, I watched, I was able to torrent it right before I did this and finally found it again. But yeah. I saw that and that really . . . and my dad was like, oh, yeah. Like, he knew what it was about. He said that he always wanted to do it and whatnot. So, something
kind of clicked, and it sounded really cool, and I wanted to do it. So, I mean, I
don’t really know either what made me want to do it, but I mean, I don’t know.

(TV Idol)

The documentary about the AT, along with his father, influenced TV Idol to begin
thinking about doing a long distance hike. He was not sure what made him finally decide
to hike the Appalachian Trail, but the documentary made him aware of the AT. This
knowledge of the AT then allowed him to begin cultivating the idea that he might want to
do this someday. Wandering Farmer also mentioned a documentary when I asked him if
there were any former influences that inspired him to hike the AT:

I actually—I’d seen the National Geo special and I, I thought that didn’t do a very
good job of showing the true AT. Especially now that I’ve been here, I really feel
that way. (Wandering Farmer)

Wandering Farmer mentioned this documentary as an influence, however he felt that the
documentary did not portray the true nature of the Appalachian Trail. His experience on
the AT changed how he perceived the documentary.

Methuselah talked about photographs when I asked him about formative
influences that inspired him to hike the AT:

I read a lot of John Deer stuff. And Sierra Club. I was kind of fascinated by
some of the photography of the Sierras, like Galen Rowell, and I wanted to see
the places that he photographed. (Methuselah)

Methuselah mentioned John Deer print media and the Sierra Club. He went on to
talk about the photographs of Galen Rowell, who was a wilderness photographer.
Methuselah was captivated by the nature photographs from this artist and this influenced him to see some of these nature areas. *Part of my interest in designing a dissertation that took place on the Appalachian Trail lay in my aspirations to one day thru-hike the AT. Approximately a year before proposing this dissertation, I watched an independent film entitled Southbounders which chronicled the thru-hikes of a few fictional individuals hiking the AT from Maine to Georgia. Before seeing this film, all of my nature experience dreams and goals involved the Rocky Mountains, Yellowstone National Park, and generally going “out West.” Through this film, I was introduced to the Appalachian Trail and I went on to watch a number of documentaries about the AT. I began to think about thru hiking the AT and it is still something I want to experience some day.

In listening to participants’ stories about their hiking and their reasoning for undertaking a thru-hike, my longing to have this experience has grown. I have what some participants called “the fever.” It seems that when people get it into their head that they want to thru-hike the Appalachian Trail, then they will somehow find a way to do it in their lifetime. At least, that is how “the fever” feels to me.

I also would love to read a lot of the books that other thru-hikers have read about long distance hikes. However, I have made a conscious effort to not read any books which are written about personal experiences of long distance hiking on the Appalachian Trail, the Pacific Crest Trail, or the Continental Divide Trail during the entirety of my dissertation process. I wanted to ensure
that all the ideas that emerged from my analyses of the data were in fact from the data and that external stories from these books did not contaminate the study.

Like many of my participants, I plan on being inspired by these books after my dissertation is finished!

**Emergent theme: Reasoning.** Participants cited a number of reasons for choosing to thru-hike the Appalachian Trail. Some participants chose to thru-hike in order to facilitate self-discovery. Some participants chose to thru-hike because of previous nature experiences or because they had a love of nature. Other participants wanted to escape from a life of consumerism. Many participants listed a number of these as reasons for hiking the AT.

One reason for some hikers to thru-hike the AT was for self-discovery or healing. Sparrow outlined how her choice to hike was multifaceted:

So, I actually, sophomore year of college, was kind of like a rough year. For most people I feel like sophomore year is always like, who am I? What am I doing in the world? And I definitely hit that point . . . Yeah, I definitely hit that point and was like wanting to drop out of school, and I was like, I can’t drop out of school. And so, we were like chatting one day because we went to different schools, and I was like, I think we were both kind of in that place, and I was like, why don’t we thru-hike the Appalachian Trail? And so, I kind of like convinced this one to do it, and it was like our motivating factor to like get out of school and you know, have something planned for after we graduated and stuff like that. So, yeah, so that was a big reason, and then it’s definitely morphed over the years because that
was three years ago, maybe three and a half now. And you know, it’s just a great way to like heal and just learn a lot about yourself, find community in other people. (Sparrow)

Sparrow talked about a number of different reasons here. Her plan to hike the AT with Silent Spring was a reward for completing college. During college, she was struggling with self-discovery, which made staying in school a hard choice for her. Having a reward planned helped her to get through college. Other reasons for hiking were to heal, learn about herself, and also to have social experiences and feel included in a community. Silent Spring gave some of her reasons for hiking right after Sparrow talked about hers:

Um, yeah, I didn’t really know much about the AT before [Sparrow] just proposed this idea to me, and I was like, sure. I love adventure and I love hiking and backpacking and being outside, and it just sounded like a fun thing to do, and yeah, definitely like good soul searching time. (Silent Spring)

Like Sparrow, Silent Spring wanted to engage in self-discovery. She also talked about her love of the outdoors and outdoor recreation activities as primary reasons for wanting to thru-hike the AT. Two Dog also mentioned the idea of hiking the AT as a reward. He said “But really parenthood, you know. It was a good positive thing, but that’s just, it’s a reward for me now to do something too, so.” Being a parent is mostly about caring for another human, so Two Dog wanted to do something for himself after raising his son. He had mentioned earlier in the interview that he became a parent very young. Being able to hike the AT after having dedicated himself as a parent acted as a reward for him. In addition, like Silent Spring and Sparrow, Two Dog chose to hike the AT for self-
discovery reasons: “I’m hiking it to use as a tool to figure out what I’m going to do next in my life and just take this walk.”

Some participants talked about previous nature experiences influencing their decision to thru-hike the Appalachian Trail. Wandering Farmer’s experiences of hiking influenced him to seek a longer hike:

Certain experiences— you know, I suppose like out west when you hike, the trails tend to loop or be too short, you know? At the end of a hike you’re always like, wow, that was cool, but—so to know that there’s a 20, almost 2200 mile trail continuous is exciting. So I would say, I would say that day hikes, short hikes led to the ultimate hike. (Wandering Farmer)

Wandering Farmer had enjoyed his previous hiking experiences so much that he wanted to embark on a much longer, more in-depth hike. Two Dog also mentioned previous outdoor activities:

I guess, you know, hunting and being in the woods made me want to come and you know immerse more into nature . . . my stepdad first was active in Cub Scouts and Boy Scouts. And so I’ve hiked a lot with him. And I think that’s where I got bit for hiking and having a pack and trekking. (Two Dog)

Two Dog mentioned hunting and just being in nature spaces. He also talked about hiking with his stepdad. These experiences led him to really enjoy the act of hiking. This enjoyment of hiking was one of the reasons that Two Dog was on the AT.

Methuselah had already completed a long distance hike:
It was, well, I hiked, my first choice was the Pacific Crest Trail, which I hiked in ’11, and . . . Yeah, it was on my bucket list. So, I kind of wanted to do all three. I wanted to do this one and then probably the CDT. But I guess that’s the reasons . . . I just love, you know, I love the outdoors. And I like walking through it. I mean, I used to run through it, and walking is . . . you see a lot more. So, and plus I can’t, I’m getting so old, I can’t run anymore. (Methuselah)

Methuselah knew that he enjoyed long distance hiking. He decided to hike the AT because he wanted to complete the Pacific Crest Trail, the Continental Divide Trail, and the Appalachian Trail. In the backpacking and long distance hiking world, completing thru-hikes on these 3 trails is called the Triple Crown. Methuselah also wanted to hike the AT because he has a love for the outdoors. He wanted to be able to see the outdoors and walking is easier for him now that he is older.

A few participants mentioned that they were hiking in order to take a break from some of the entrapments of humanity. For example, Desert Fox was troubled by consumerism:

Um the grips of society was kind of getting hold of me and consumerism mostly. I own way too many DVDs and . . . the fact when I go back I’ll probably end up buy more and I felt like I needed to get away from that . . . So it was definitely nice being out here and being on your own in a sense you know. Everything on your back, your entire home, you lose something and you need to repair it or replace it. (Desert Fox)
Desert Fox wanted to take a break from being highly consumer driven. Nature provided a place where he could escape a life of material possessions. His thru-hike allowed him to live with everything he needed on his back.

In answer to the research question, participants’ reasons for hiking encompassed a few different motivations. Self-discovery, previous nature experiences, a love of nature, and escaping consumerism were among the most prominent reasons that led participants to thru-hike the AT. For many participants, there were multiple reasons and influences that brought them to the thru-hiking experience on the Appalachian Trail, not a sole factor or influence. Also woven into these reasons were the significant life experiences and formative influences discussed above that participants cited as having led them on a path to the Appalachian Trail. The SLEs, formative influences, and reasoning are all a part of how each participant’s journey was shaped. This enriches our understanding of what leads people to engage in experiences with/of nature and the outdoors.

**Research Question 3**

How do people connect to nature or the outdoors during an intense nature experience? Connection to nature is a complex human emotion; therefore, it is a very personal element of one’s nature experiences. People connect to nature in various ways and in varying degrees. One theme that emerged from my conversations with participants is that in the human-nature relationship, people often view nature in relation to themselves. As discussed earlier in the findings relating to research question 1, participants varied in whether they felt they were a part of nature, a visitor in nature, or
separate from nature. Many participants also felt that their connection to nature was
different on the trail versus in everyday life.

**Emergent theme: Relationships with nature.** Participants had different kinds
of relationships with and connections to nature. This came across in how participants
related self to nature, or how they saw themselves in relation to nature. Some
participants felt that they were a part of nature, whereas others felt that they were separate
from nature. In a previous section, the idea of being a visitor in nature was discussed.

Participants who felt that they were not a part of nature often felt separated by
some element other than themselves. For example, Darjeeling saw himself as separate
from nature:

> Separate from nature but part of creation . . . I’m definitely in nature. I would not
say I am a part of nature. ‘Cause I guess I see nature as kind of something
cultivated for human pleasure. And so I couldn’t be part of that. Like it’d be—
it’s just something to appreciate. I think we—I might—people might have a
distorted view of nature to see themselves as part of it. Like I said, humans enjoy
nature but we are part of creation. (Darjeeling)

Darjeeling believed that nature was provided for human use, therefore he could not be a
part of that nature. He saw himself as being a part of creation in the Christian sense, but
believed that nature was created for his use. He also thought that humans in general
should not see themselves as a part of nature. Darjeeling was separate from nature
because he saw himself as being in a position over nature.
Hundchen felt separate from nature as well. She said, “Actually, I don’t see me as a part of the nature. I feel like I’m a stranger in the nature, like in another country. I go through that and I enjoy it. It’s like to take a journey . . .” Hundchen felt that she was a visitor in nature, a stranger or a foreigner. However, this did not have a negative connotation. It was more like nature was a special and wonderful place that she wanted to visit and experience. Her feeling of separateness had more to do with a feeling of awe than it did with feeling apart from nature. Freebird also felt separate from nature:

Uh as much as I like to be a part of nature I still think I’m just a little too far separated. Um I still need certain things that I couldn’t handle out there on my own, but uh I’d probably say separate. (Freebird)

Freebird aimed to be a part of nature, but because he could not survive in nature without bringing outside elements in with him he still felt separate.

Freebird, Hundchen, and Darjeeling all saw themselves as being separate from nature. In each case there was some element that the participant felt kept them separate from nature. For Darjeeling, his beliefs about creation divided him from nature. Hundchen’s sense of awe created a barrier between her and nature. Freebird’s reliance on things that are not from nature in order to survive separated him from nature.

Some participants felt that they were both a part of and separate from nature, or were in a transition between the two. Growing Pains felt that she was both a part of and separate from nature:

Hmm. I think in the beginning, I saw myself as hiking in nature, ‘cause I was still unfamiliar with a lot of it. Um, ‘cause everything was really like brand new to me
and I felt like just the weather and how it was, it was, it was kinda making me go its direction, other than, you know, me saying, I’m gonna do what I want. And as the seasons are changing and it’s getting nicer outside, I feel like I am one with nature. Just because it’s a lot easier and, um, I get to—I get to have a say in what’s going on in a sense. In the beginning, I felt like I couldn’t—I didn’t. You know, it was like, no, “I’m nature and you’re gonna do what I say.” And you know, “you’re gonna follow my rules.” But now that it’s getting a lot nicer outside I feel like I have a say, nature has a say, and we’re working together to just like make the path amazing. (Growing Pains)

Growing Pains saw nature as a powerful force that controlled her in the beginning of her hike. As she experienced more of her hike, she began to feel more connected to nature. The changing weather made it easier for Growing Pains to feel comfortable in nature. As the weather improved and Growing Pains became a more experienced outdoors-person, she felt that she was working with, as opposed to against, nature. Later in the interview, Growing Pains said that she did feel like she was a part of nature.

A part. Simply a part. You can’t be separate from it. If you think you’re separate from it, then there’s something wrong. You know, ‘cause um, we don’t have full control so you have to be a part of this because it’s, it’s nature. It’s your everyday, it’s everything you’re experiencing. And uh, you are a part of it. Everything that’s going on affects you and you can’t not be affected by it. You are a part of it. (Growing Pains)
Again, Growing Pains mentioned this idea of control. Previously, she stated that her lack of control made her feel separate from nature, but here she said that her inability to truly control nature made her a part of the whole nature system. This change may have been due to her feelings of discomfort and struggle at the beginning of the hike versus her current feelings of ease with nature. Her continuing experience in nature may continue to increase her comfort with nature and therefore decrease feelings of separation from nature.

Nails’ view of herself as either separate from or a part of nature was also in transition. She was nearing the end of her hike when I interviewed her and was the only participant that had not wanted to hike the trail. She described her fluctuating feelings about her connection to nature, “I’d like to say I’m part of it but I don’t really know . . . I definitely feel like more a part of nature now. Just being in it you know.” She went on to describe this idea in more depth later in the interview:

I know I’m in nature ‘cause nature is already there. So you’re kinda coming in to that world but you know, being out here as long as we have, I kind of feel like even I’m a part of it, you live in it you know, you get your water from it, you live with everything else that’s out there. (Nails)

Nails was hiking the AT because her husband wanted to, and she wanted to support him and take part in the adventure. She did not spend a lot of time outdoors as a child or young adult. This extended nature experience led Nails to feel like she was more a part of nature. She saw nature as something that “is already there” but that she might be able to join with through spending time outdoors.
Nails’ husband, Fortis, also negotiated between seeing himself as a part of or separate from nature:

I would say most times in nature and occasionally, those really special moments is when you’re part of nature. But . . . they happen. But, but, but most always on end basis and I do always have that feeling but occasionally, I’ll drift in there and actually transcend. And I like that, I wish it could be permanent. Like, if I could figure out a way to turn that switch, I would. And maybe that’s why some hikers come back. Maybe it’s that feeling ‘cause that is that special feeling and you get it on the trail. I think it’s very difficult to do that at home but you just can’t get it in a weekend. Or even—it takes more sustained time and that’s why I’ve talked about that spiritual part of it, it comes after the physical and the emotional and you hit that. (Fortis)

Fortis felt that in order to be a part of nature, one needs to spend a significant amount of time there. He wanted to be a part of nature and enjoyed when he had that feeling. He saw the transition between separation from nature and being a part of nature as a spiritual transcendence.

Growing Pains, Nails, and Fortis all felt that they were both a part of nature and separate from it, or were transitioning between these feelings. Other participants felt like they were a part of nature. For example, Desert Fox told a story in which he revealed that he saw himself as a part of nature:

I was just walking down the trail and the rabbit comes running past me and I was like that’s kind of odd it chose to run past me, but then I saw on its back leg it was
kind of red, so I was like it’s being chased so I just turned around and waited for whatever was going to come around the corner. Then I started thinking to myself what if this is big? I’m just like blocking it but no it was just a little weasel maybe two feet long and had its mouth open and then saw me, stopped, and ran up a tree and took off. I’m like fumbling for my camera. I was like oh stop moving, but yeah that was nuts, that was . . . it was crazy because I’ve never actually seen something hunt something before like that . . . it was really . . . gosh it made me feel like I was almost a part of the woods now, cuz it’s like these things are in the middle of something and I kind of interrupted it you know in a sense. I started thinking to myself well now I’m almost in the way. (Desert Fox)

Through his experience seeing animals interact in their natural habitat, Desert Fox felt that he was a part of nature. He was in the space where these natural processes take place so he almost felt that he was in the way. He went on later in the interview to say, “I think we’re all a part of nature. I mean we just happen to control our environment a little differently than most other species. I don’t think we’re anything else put out here to live.” Desert Fox saw himself as just another organism on the planet. He could not be separate from nature since he saw himself as no different than from other living thing.

For some participants, connection to nature seemed to be different on the trail versus off of the trail. For TV Idol, this seemed to be the case. In asking him about his connections with nature on the trail, he said:

. . . with nature . . . that’s everything that, that controls my day is like the weather, you know. So, that’s my relationship with it . . . It’s controlling me,
yeah. It’s what I depend on a lot, and it has a direct, even more of a direct connection to me... (TV Idol)

I then asked if this was different than his relationship with nature when he was not hiking the trail and he replied, “Well, of course ‘cause I’m living in it.” TV Idol’s relationship with nature on the trail was different than in his everyday life because nature and weather had a larger impact on his life on the trail. He claimed that nature not only controlled him, but that he was also dependent on it. When he was on the trail he felt directly connected to nature. TV Idol’s connection to nature became more intense after being on the AT. He was beginning to see nature as a powerful force in his life. This can also be connected to TV Idol’s awareness of nature in that he seemed aware of weather as a natural force since it was a large part of his experience on the AT. Even though he did not seem overly aware of nature in general, he was aware of those elements of nature that directly influenced his daily hikes.

Liege also had a different relationship with nature on the trail versus off the trail. When I asked him how he sees himself in relation to nature he replied: “Tragically separate . . . Why do I see myself as separate? I think because I didn’t grow up in that environment. I’m not a part of that environment.” Liege saw himself as separate from nature because he did not grow up in the environment like another organism might. He said that this is tragic, which indicated that he wanted to be more of a part of nature. When I asked him how he sees himself in relation to nature on the trail he replied: “While I’m hiking the trail, I see myself as striving to be a part of nature.” I asked if he could give me an example of this and he said:
Well, I find myself regularly just wanting to take my shoes off and walk barefoot. It’d make me feel like I was less dependent on society for . . . more, I mean, there’s no other, for example, there’s no other human being, or, there’s no other animal that creates shoes. It would just be a step backwards towards . . . yeah . . . with our level of intelligence and the way we build technology it’s impossible probably to be completely a part of nature, but we should definitely try to at least strike a balance with it and not destroy it for its resources. (Liege)

Therefore, his experiences on the AT allowed him to build a closer connection to nature. He wanted to take off his shoes, which might have made him feel closer to nature by being in actual contact with it. Taking off his shoes might also have helped him feel closer because it removed a man-made barrier that came between him and nature. He compared humans to other organisms that might not manipulate their environment as much as humans do. He also indicated that humans may never be able to be fully embedded in nature since our societal and technological advances have served to separate us. However, he believed that we should still strive to be as much a part of nature as we can without destroying it.

Candy Elf felt that she was more entwined with nature while hiking the AT:

. . . we are a part of nature. Like, especially walking the Appalachian Trail, we sit there, we wake up, we go to sleep with it. You know, we’ve made this our new recreation, our new socialization. You know, a family and everything. We’ve made it our new job, our new education. We’ve made it our all. Just so you know it—those who strongly believe the Appalachian Trail is nature, we are
part of it because—and this will sound bad, but we’re—we’re peeing and pooing in nature. We’re playing our, our own little part in nature. So we are nature.

(Candy Elf)

Candy Elf felt that all of her daily life on the trail was connected to nature. She saw that everything she did throughout her day was done on the trail, and because the trail was a nature environment to her, all these activities occurred in and around nature. She reiterated her point later in the interview:

Like I said before, yeah, we are part of nature. Because we are living in it. We are living in, on, around, with nature. Nature’s waking us up, nature’s putting us to sleep. We don’t know time out here. Time to us is sunrise to sunset. And then after that, we’re required to use batteries. But I mean, this is our recreation, our education, our life, our socialization, our family. This is—it’s—after a while, I’m sure, it’ll start feeling more natural to us, ‘cause I know it has already started feeling more natural to me. But we are living in, on, around, with nature. (Candy Elf)

Candy Elf saw nature as being entwined with every aspect of her life during her AT hike. This revealed how important nature was to Candy Elf while she experienced her hike, and how much it impacted her. She saw nature as “recreation,” “life,” socialization,” and even as “family.”

These participants showed how the experience of thru-hiking the Appalachian Trail and living outdoors for an extended period of time impacted their relationship with nature. The human-nature relationship can change when people find themselves in a
nature environment. A person’s relationship to nature can also change in a nature environment because elements of nature have a larger impact on the person.

Response to research question 3. Participants connected to nature in different ways during their hiking experience. Some participants were separated from nature by elements such as feelings of awe, ideas about creation, and reliance on things other than nature to live. Other participants negotiated between being a part of nature and being separate from nature; still others felt like they were a part of nature. Many participants felt that their connection to nature was different on the trail versus off the trail.

Participation in a long-term nature experience changed how people related to nature.

Research Question 3a

What are participants’ conceptions of nature? Participants defined nature in personal and diverse ways. It is important to note that the ideas that emerged from participant interviews about conceptions of nature are not exclusive. Many participant views of nature spoke to multiple themes. Participants bounded/bordered nature as a space in various ways. Definitions of nature were also variable, although many people separated nature from humans in their conceptions.

Emergent theme: Bounding/bordering nature. One interesting way that participants defined nature was by bounding/bordering nature. Participants often defined nature in terms of bounding/bordering of spaces. This means that under these participants’ definitions of nature, a physical space must include certain characteristics to be considered nature, whereas any space outside of this is not nature. TV Idol said “I think Nature is water. That’s like the base of life. So, nature is water. Wherever that is,
yeah, that’s nature.” Under TV Idol’s definition of nature, water must be present for a space to be considered a nature place.

Participants also bounded/bordered nature by separating the terms “outdoors” and “nature.” To many participants, these words defined different types of spaces. TV Idol described how he considered a vacant lot to be outdoors but not nature:

. . . a vacant lot is like under the context of being in a city or suburb or some type of neighborhood right? Because you wouldn’t call a bald a vacant lot . . . What makes a vacant lot a vacant lot depends on the context, on what surrounds the vacant lot. (TV Idol)

Even though a vacant lot and a bald share certain characteristics, such as vegetation made up of grasses and small shrubs (balds are mountain peaks or ridges covered mostly by short vegetation or shrubs where you might have expected to see forest growth), their surrounding contexts made them different places to TV Idol.

Silent Spring struggled to define nature concretely, however, she bordered the outdoors as a different type of space than wilderness:

Um, yeah. I like, I kind of struggle with the definition of wilderness, um, because I read Bill Cronin’s essay ‘The Trouble with Wilderness’ and then was like oh my god, so mind blowing. But, um, but I—so like I always think like oh yeah, the AT it’s not real wilderness it’s like super close to development and like farms— they’re like cultivated so they’re obviously like very impacted by humans and not like just, you know, letting nature run its course. So, it’s like a green space in my
mind but it’s not like, um, it’s not like wilderness or anything to me. (Silent Spring)

Silent Spring bordered nature and wilderness differently than green space. For her, the Appalachian Trail was not wilderness because it was too intertwined with civilization. Nature and the outdoors were bordered differently as spaces.

Sparrow explained how she saw the differences between nature and the outdoors:

Yeah, uh, some people think outdoors is a turf field and to me, that’s not necessarily nature. You know, there’s nothing natural about turf. Um, but so you know I think there is stepping outside of a door and you’re in the outdoors. Um, and then, once again there’s varying degrees of outdoors. You know, it is what you make it. Um, but I don’t think nature and the outdoors are the same. Because some people think, you know, I’m outdoors, I’m walking down Fifth Avenue and it’s like, um—yes that is true. You are out of doors if you’re walking down Fifth Avenue but that’s not like nature, you know. Um, so yeah I think it’s—they’re different for sure. (Sparrow)

Sparrow bordered outdoor spaces differently than nature spaces. In order for an area to have been considered a nature space it must have met more criteria than just being out of doors. There were different “levels” or categories of outdoor spaces and only the highest levels qualified as nature spaces.

Darjeeling also made a clear demarcation between the outdoors and nature:

Yeah, ‘cause I would count like riding your bike outside, like even in like the suburbs as outdoors. Whereas, I would view like nature or creation as like, you
know, the woods, some sort of area. It seems like nature had—would have more clear bounds, more specific parameters as like a place to enjoy nature, whereas outdoors is just kind of literally out of doors for me. A park would be nature, I think. Like a—especially like a well-made—like, uh, I would even call like a botanical gardens. Like I’m a member of the botanical gardens at my, uh, where I live in Huntsville, and I would describe that as nature because it’s, it’s kinda like the best of both worlds. You have human cultivation of nature. Um, parks, national forests, rivers, I’d call that nature. Uh, and you need outdoors, like I would—you know, the suburbs is still outdoors, like you know, little parks there. I guess I would, I guess the way I’m thinking of all the examples, nature has like a specific set of parameters and geographic borders, where the kind of goal is to enjoy it for itself. Whereas outdoors is just kind of there, it’s nebulous, it has no specific use. I would say, you know, nature’s supposed to be enjoyed and cared for by humans, where outdoors seems almost like something forgotten. It—outdoors could be almost anything, I guess in mind, whereas nature is specifically to be enjoyed and maintained. (Darjeeling)

Darjeeling saw a nature space as being woods, a garden, or a park. Outdoors was simply being outside in any environment. Unlike some of the other participants, Darjeeling did not see human cultivation of nature spaces in a negative light. He saw nature as a part of creation that should therefore be utilized by humans. Darjeeling did not see spaces that were influenced or touched by humans as non-nature spaces. However, he did still separate outdoor spaces from nature spaces.
Emergent theme: Conceptions of nature. Participants defined nature in a number of ways. Many participants defined nature in terms of separating anything “natural” from anything “man-made.” Another way that some participants defined nature was by demarcating spaces that included certain elements as nature spaces.

Separating nature from anything influenced by humans was one of the most prominent ways participants conceptualized nature. Silent Spring talked about her struggle with defining nature:

I think of nature as like just—I don’t know. It might sound weird but just like the basics. Like just like—I don’t know. Dirt. And like—outside, I don’t know like—everything that’s not nature to me it just seems so like superficial and, like, I don’t know—manmade, like, that sounds like such a cliché answer like—man, nature, separate things and like, I don’t know. But I, like I said, I really struggle with the definition of wilderness because I’ve been thinking about that for several years and just like, hashing out my feelings about what I think of as wilderness. So, yeah, nature is like even harder because it’s like even broader and less, I don’t know—I think it can definitely—definitely means different things to different people. So, I don’t really know. I haven’t thought about that enough. (Silent Spring)

Silent Spring had just finished a degree in environmental science and had thought about how she conceptualized nature before this interview. She was unsure about what nature was exactly, however, she was sure that it was not anything that is manmade.
Wandering Farmer defined nature “as anything not altered by man.” He expanded on this idea in his response to me asking if a vacant lot or old cornfield is different than Yellowstone National Park, in terms of nature spaces:

No. Well, it is different in that fact that it’s been altered at one time, but if it’s left alone it’s—it is nature. I guess, I would describe it as, as soon as it’s not concrete-covered and not roof-covered, it’s nature . . . It’s, it’s no longer controlled by man . . . As long as nobody’s plowing it, spraying it with herbicides, it’s nature. Even if it is being sprayed, it’s nature. A cornfield I would consider nature. It’s, it’s—uh, I don’t know the word to use. Uh- (Wandering Farmer)

I then prompted him, “like a living thing?” to which he replied:

It is. A cornfield’s a living thing, by all means. You know, especially the soils. You know, everything’s—everything—a lot of what was originally there is still there, it’s just being manipulated by man. But it’s still nature. (Wandering Farmer)

Although Wandering Farmer originally postulated that nature was anything not touched by man, his explanation was less clear cut. He went from saying that if something is left alone it is nature to saying that even if something is manipulated by man, if it is alive then it is still nature.

Liege was much more concrete in his assertions. He claimed: “Nature? Means . . . I guess, untouched by man.” Pioneer was just as succinct with his thoughts about nature: “Nature means, uh, in one sense, that which man has not marred, um, but it’s really, everything that’s not manmade.” Hundchen said that “nature is where it’s not a
huge influence of humans” and Frauline Fertizig agreed, saying, “nature is not building from people.” Goodwill also felt similarly, saying nature is “everything on this Earth before humans impacted it.” It was very clear from these examples that for many participants, nature was something separate from humans.

There were some participants who did not separate humans from nature in their conceptions. At the beginning of my first data collection period, I hiked through a section of the AT that passed through a large cow pasture up on a ridge. Some participants talked about walking through this field since they had just recently experienced it when I interviewed them. My conversation with Sparrow about this space reflected her views about not always separating humans from nature:

Um, I think it’s a different kind of nature space. You know it’s—I love farms. I think, uh, you know especially when they’re like small local farms, um, you know it brings you back to your roots kind of thing. It reminded me of school a lot too which was awesome because I was a part of the Ag-school at the University of Delaware. Um, so that was really cool to like walk through a farm. Um, I think it’s just a different kind of nature space, you know. I think a lot of people think of nature as like the woods, but, you know farms, that’s how we get our food. So, uh, I think you know—just like I said just a different nature space. (Sparrow)

A farm is a space that is highly controlled by humans, but Sparrow saw that as “a different kind of nature space.” She mentioned that farms are how we get our food. If humans are organisms that are part of the biosphere with all other organisms, then where
we get our food might be an adaptation just like other organisms’ feeding behavior. This would mean a farm could be a nature space.

Some participants conceptualized nature as more of an idea than as a physical space. Silent Spring and Fortis provided good representative ideas for this phenomenon. Silent Spring revealed this concept through her struggle to define nature:

I mean, normally when you hear nature you just think green, trees, animals. But I mean, nature is . . . I don’t know, it’s just so much more than that. There’s just, you know, it’s who you’re around. That’s a nature that you’re in. You know, it’s, it’s like where you’re living. You know, different interactions you’re having.

Um, I don’t know. I think nature is broader than a lot of people think of it. Um, ‘cause I mean like we were talking about earlier, I mean, there’s like even different levels of it. You know, there’s wilderness areas, there’s like protected areas, there’s like parks, there’s farms, there’s like so many different forms of nature. And you know, I think, you know, if we’re gonna get generic, like nature is, you know, like being in the woods. But you know, it’s like, there’s just so many different levels. It’s—I don’t know, it’s—that’s a scatterbrain answer . . . But yeah, it’s just, I think it’s super hard to, to really define it. It’s kinda like, again, what you make it. You know, for me, that’s the biggest thing about environmentalism, nature, it’s what you make it. You know, I mean some people are like super amped to be in the wilderness and that’s like their nature. That’s how they’re gonna consider nature—is like the wilderness, like the Alaskan back country. Other people are gonna think like this is wilderness and it’s like - or like
this is nature. You know, and it’s, you know, or just a park. You know, it’s kind of like what you’re comfortable with. You know, or maybe a climbing crag is like your nature, you know. Or, or maybe, you know, white water rafting is your nature. And it’s- yeah, it’s, it’s kind of like what you make it. (Sparrow)

Silent Spring provided a thorough explanation of how nature is an idea that is defined differently based on how each individual perceives it. She came to this conclusion after struggling to define what nature actually is to her. Silent Spring felt that there were different levels of nature and different types of nature. According to Silent Spring, how an individual sees each of these types or levels of nature would define what counts as nature for them personally.

Fortis also thought of nature as more of a state of mind. He brought his definition of nature back to his previous thoughts about awareness of nature:

It’s the awareness of the outdoors, that’s when it crosses over into nature where outdoors is simply a physical thing, you’re outdoors so I think nature is being aware of your environment as it is and, and, and what it’s speaking to, not trying to define it . . . but if you get down at that grass at that soccer field, there’s a lot of nature going on in there, yeah . . . I do, I do think it’s an awareness thing. Because I’ve thought about that and I can be in my backyard you know, with houses all around and as long as I can walk out, I took a wall out to just see what’s going on around me and take it to what it is, it’s definitely nature. So I think it’s an awareness. I think it’s the awareness that makes the difference. I truly do. ‘Cause you’re outdoors when you’re on this trail. But I do not think
there necessarily is any connection with nature. I truly believe you can hike this trail and not have the awareness.

For Fortis, nature was not nature unless you were aware of the nature around you. He did not think that nature and the outdoors were different, only people’s perception of them. He also did not separate nature from humans or from manmade elements. If he was aware of nature in any environment, then that is nature. If a person is not aware of nature in any environment, then it is not nature for that person.

In answer to the research question, participants’ conceptions of nature were quite varied, although there were a number of similar definitions. Many participants bounded/bordered nature as a space in various ways. Definitions of nature were also variable, although many people separated nature from humans or from manmade elements. There were also some participants who conceived of nature as an idea or state of mind rather than a physical space with defined borders.

**Research Question 3b**

How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature? In this section I discuss the evolution of the relationships between space, place, and identity. Two themes emerged from the data addressing this idea. The first theme I discuss is place-making. This theme comprised two different aspects of place-making. First, many participants found that the Appalachian Trail as a place became more meaningful to them after they experienced it. Second, for some participants, experiencing a thru-hike on the Appalachian Trail shifted
their ideas about what nature is. The second theme I discuss is that many participants felt that the experience of hiking the Appalachian Trail changed them as a person.

**Emergent theme: Place-making.** One tenet of critical geography is that space becomes place when the actor imbues said space with meaning from personal experience of the space. This idea came across in a number of ways in my conversations with participants. Many participants expressed that the Appalachian Trail as a place became more meaningful to them after they experienced it. In other words, the Appalachian Trail evolved from space into place.

Silent Spring explained her evolving feelings about the Appalachian Trail when I asked if she felt a connection to it:

I’d read about it, and that was about it. I heard about it a little bit but I’d never been anywhere near it. Um, I’d like driven under a bridge that said “Appalachian Trail” but very minimal . . . I mean like I’ve hiked, you know, over four hundred miles of it now so I’ve seen a lot of it and understand the culture now and experienced the culture now so, definitely has become more meaningful to me. More meaningful for sure.

Before Silent Spring experienced the trail, it was not meaningful to her. Her experiences on the trail and in the hiking community turned the AT into a space imbued with meaning. Silent Spring’s hiking partner, Sparrow, agreed with this:

Yeah, I would agree because you’re experiencing it firsthand, physically, emotionally and, um, it’s different than just like hearing about it or seeing pictures
of it. Uh, you have firsthand experience there and so therefore it has like meaning to you. (Sparrow)

Sparrow explained how experiencing the trail brought meaning into a space more than second-hand experiences did.

Darjeeling gave a great explanation of how place-making occurred for him on the trail:

I feel much closer now. Uh, both in terms of like the physical, obviously I’m here, and with the kind of community of people that maintain and keep stewardship over the trail . . . I’ve actually announced my intention and began the physical process of the trail. So now it’s just I’m not, you know, an interested fan of the trail, now I’m actually engaged with the trail. And so now that that has happened, the people who have stewardship over the trail with like the ATC and like the hostels along the way. You know, as stewards of the trail, now they are specifically here to help the people on the trail and the trail. So, now I am literally being taken care of by these people. (Darjeeling)

For Darjeeling, meaning-making on the trail occurred through the social community of the AT. He was also able to experience it for himself by being physically and emotionally present in the space. Pioneer gave a similar account:

Uh, growing up the California, the AT is not really, you know, relevant . . . Um, I’ve been here, um, through hell and high water, literally, on the AT now, um, and with the fellow hikers. Um, so individually and collectively as a group, I feel,
um, bonded and, you know, bound to the people, the hikers, and the trail.

(Pioneer)

Pioneer included not only the trail but the community in his connection to the AT.

Methuselah told the story of how the trail became a meaningful place to him. I asked him if he felt connected to the AT before he began his hike. He replied:

No, I never did. Honestly, I, like I said, I was from the West, 30 years ago I stepped on the Pacific Crest trail, and I said, I want to do this someday. And 40 years ago, I was in the Shenandoahs and I was on the Appalachian Trail, and I really had a desire at that point in time in my life to hike it, didn’t know anything about it, didn’t hike. So, but since I started hiking, I thought, well, it’d be fun to do another old trail or long trail. And that’s the other trail I like to do is the long trail, which is the oldest trail in the country. (Methuselah)

Do you feel a connection to the trail now that you’ve been on it for a while? (Vanessa Klein, Researcher, Interviewer)

Sure, after a thousand miles, yep. You’re really tightly connected to it. You know, it’s a different trail and it’s beat me up pretty good. So, I’ve kinda, you know, I’ve come to the conclusion that I’ve gotta work a little harder at, to complete it. (Methuselah)

Methuselah went from not having any connection to the trail at all to feeling “tightly connected” after hiking to the midpoint of the trail. Even though his experience was very intense—and not in exclusively positive ways—the AT still became a special place to him through his experiences.
Some participants’ conceptions and definitions of nature as a place changed as a result of their hiking experience on the Appalachian Trail. This evolution occurred in varying degrees and not all participants experienced this change. For example, Sparrow and Silent Spring thought that their appreciation for nature had become stronger. Sparrow said, “I think that’s definitely [something we] both share is that we’ve had a pretty intense appreciation for nature before we got on the trail and so that appreciation has kept on, if not, gotten more intense.”

Some participants felt that this experience changed the way that they thought about nature. Goodwill changed his conception of what a nature space was:

Uh, before, I viewed nature as just like maybe going to the park or something like that. Somewhere like local and like, you know, being outside by a running water source or like some trees or something. But you know, pure nature is like Alaska, you know, where there’s, where there’s not civilizations everywhere and there’s not human structures and you know, the, the cycle—the lifecycle just, just moves on, you know, uninterrupted by humans. That’s, that’s real nature for me.

(Goodwill)

Goodwill’s definition of what nature is had become more narrow as a result of his experience. Similarly, Hundchen’s conception of nature also became more specific:

“Yeah, nature is—nature is nature. Nature—I mean, city’s not a nature. If, if there’s a little park in a city, that’s not nature. But everything on the countryside and the AT, that’s where.” Both Goodwill and Hundchen began to remove humans from what they deemed nature spaces. Nature became more wilderness oriented.
Fortis’ ideas about nature changed in terms of his feelings of ownership over nature:

I think it’s changed in the extent that I have lost contact with it a little bit and that’s also that possessive thing that I told you about, I needed to possess these things because I wanted to preserve them and now, even though I haven’t seen a bobcat or a lynx up here, I know they’re there. I mean, just that feeling alone is good enough and maybe even better. (Fortis)

He had explained this idea of possession earlier in the interview:

It’s taken me almost to this age to realize that I don’t have to possess to enjoy that. I would, I did. I felt like I had to have them and I had, I had eight-hundred tarantulas at one time. (Fortis)

Fortis’ outdoor experiences, as well as hiking the AT, influenced his ideas about trying to own or possess nature. His experience of thru-hiking led him to feel that it was good to just be aware of nature around him; he no longer felt like he even needed to see some of the organisms.

Freebird and Dessert Fox reported that their conceptions of nature had shifted, but they were unable to fully articulate their reasoning:

Um for me, I wouldn’t say it’s really changed as much as I guess evolved, which is a change, so in a way I guess it has um . . . I don’t know it’s just I don’t know where to go on that. (Freebird)

There’s a difference I get it, between a change and evolution . . . For me most of my nature experience aside from the few memories I have as a kid came from
television and movies, stuff like that and like I was saying before as an experience, it’s almost something you got to be in to really understand. Yeah so for me it definitely evolved and changed and I almost feel like I understand what it means to be in nature. (Desert Fox)

Freebird knew his ideas about nature had evolved but could not say in what way. Desert Fox reported not having a lot of personal experience in nature before his hike. Now that he was almost finished with his thru-hiking experience, he felt that he really knew what nature was.

Similarly to Desert Fox, Nails also found that her experience in nature on the AT helped her to form her definition of nature:

I think so. I think I didn’t really know what nature really, really was. I mean, what it would be like to be in nature for such a long time. You know, so you kind of, yeah, for me, I feel like I’ve become aware of what real nature is you know—not just going down to the, you know, to the lake for the day or you know what I mean. (Nails)

Nails felt that her experiences of nature during her hike helped her to understand what “real nature” was. As a number of other participants explained, Nails’ conception of nature also became narrower. Instead of nature being defined by having natural elements, like a lake, her ideas about nature shifted towards a removal of humans. It became more wilderness-oriented.

**Emergent theme: Evolving identities.** Some participants felt that the experience of hiking the Appalachian Trail changed them as a person. Participants internalized the
experiences they had of the Appalachian Trail. During the discussion of findings for research question 1, it was shown that participants’ identities and awareness of nature impacted their experience of the Appalachian Trail. That experiences on the Appalachian Trail influenced participant identities revealed how the relationships between space, place, and identity were iterative and recursive.

Sparrow explained how her experiences of her thru-hike impacted how she saw herself:

> I think it’s given me a little more strength, which is what I was looking for. Um, just internally. Um, it’s making me realize that I can take charge of my own life and do the things that I need to do. Um, I’m an independent person, but like we were saying earlier I tend to worry about others more than I worry about myself and so, that’s something I’m definitely learning out here. (Sparrow)

Sparrow had more confidence in herself and saw herself in a more positive light through her experiences on the trail. Nails had a similar account:

> I can climb mountains! Yeah and I didn’t think of myself that way at all. I can rough it, you know, I mean, I’ve been in the city for a while. To me, it’s kind of a big city which I know Austin’s not really big, but for me, it was; and when I moved there and I was pretty proud of myself for adjusting to that environment and-, but doesn’t compare to, you know, to now. You know, I feel like I’ve—I wonder if I could do different things, I should be more confident. (Nails)
Nails started out as the only participant who was not hiking the AT by personal choice. After almost completing her hike at the time of her interview, she now felt much more confident in herself and in her ability to engage with nature.

The interviews with Sparrow and Nails revealed how some participants saw themselves as more than they were previous to their hiking experience. They had added confidence and knew more about themselves. Other participants felt like the hike pared their identities down. Two Dog explained how his experiences had changed him as a person:

I think, um, it takes away anything fake and pretentious. After a little while a few hundred miles knocks that right out of you and the real stuff comes out. I think you learn a lot about yourself just walking and that’s what the body was designed to do. And it’s awesome when it happens, when you just do that it’s awesome what happens and, um, and in that process, mentally, you find out a lot about your strengths and weaknesses. (Two Dog)

Two Dog felt that his experiences had stripped away anything but the most “real” parts of himself. He explained that the act of walking itself helped him to learn about who he really was.

Methuselah did not feel that his AT hike changed him as much as his first long-distance thru-hike did:

I’ve hiked before. When I hiked the last hike, when I finished, I went home and got rid of a whole ton of stuff. It makes you appreciate simple things vs. complex. You know, your house is on your back, and you go home, and you look
around and you say, gosh, I’ve had this stuff for ten years. I’ve never touched it.

So, you kind of clean house. It’s kind of an eye-opener. (Methuselah)

Although it was not necessarily the experience on the AT, thru-hiking led Methuselah to appreciate a simpler life with less possessions. Like Two Dog, he was able to strip away unnecessary things from his life.

Freebird knew that he had changed but was not sure what the end product was:
I would say beyond looking in the mirror right now obviously. I certainly . . . I don’t recognize myself in the mirror and then I look at my driver’s license and I don’t recognize that either so I don’t know if I even exist right now, but uh . . .
The way I look at myself outside of that I . . . uh I don’t know. I mean I went into this thing telling myself I could do it. And I’m toward the end. Uh I don’t know how differently . . . maybe when it’s all over when I get home, might have a new perspective on that, but I’m still kind of in the midst of all that. (Freebird)

Freebird had changed so drastically physically and emotionally that he claimed to not recognize himself. He was about 100 miles away from finishing his hike at the time of his interview, and he said that he will not know exactly how he has changed until his hike is over. He did know that he had changed in some way as a result of his thru-hiking experience.

In answer to the research question, hikers’ conceptions of the relationships between space, place, and identity evolved through a long-term engagement with nature. Participants enacted place-making through their experience on the trail. The Appalachian Trail became a place imbued with meaning for many participants. In addition, for some
participants, experiencing a thru-hike on the Appalachian Trail shifted their ideas about what nature is. Another finding that addressed this question is that many participants felt that the experience of hiking the Appalachian Trail changed them as a person.

**Summary**

This chapter described the experiences of thru-hikers on the Appalachian Trail. Through the stories that the participants recounted, I attempted to describe the iterative and recursive relationships between space, place, identity, and power. The participants constructed nature experiences, which impacted their place-making. In turn, participants’ identities were also impacted by place through experience. Participants had different reasons for hiking the trail, and they connected to nature and the trail in different ways. There were many ways in which participants defined nature as a space. Participants also learned on the trail in experiential and social ways.

Through the process of designing and carrying out this study, I describe the lived experience of thru-hikers with the Appalachian Trail environments and community. The purposes of this study were to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impact the actor’s place-making and in turn are impacted by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an informal nature experience. In the following chapter, I contextualize these findings within the existing literature and discuss implications.
CHAPTER V
DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

“To those devoid of imagination a blank place on the map is a useless waste; to others, the most valuable part.”
~Aldo Leopold,
*A Sand County Almanac with Other Essays on Conservation from Round River*

“Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values as yet uncaptured by language.”
~Aldo Leopold,
*A Sand County Almanac with Other Essays on Conservation from Round River*

This study explored hikers’ lived experience of nature while thru-hiking the Appalachian Trail. The questions that this study asked were:

1. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning takes place and how does it occur?

2. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?

3. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
   b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature?
I begin this chapter by recounting how the study design evolved from the proposal stage of the research to the final stages of analysis and writing. I summarize the main points that emerged from the study, and discuss the findings. Finally, I discuss implications for future research as well as how this dissertation supports my future lines of inquiry.

**Initial Assumptions and Reflections**

This study was undertaken from a naturalistic inquiry design perspective, therefore it evolved and emerged through the process of doing the research. In this section, I discuss how the study design evolved. Lincoln & Guba (1985) explain that naturalistic studies are very difficult to definitively design before the study is undertaken, and that sampling is emergent in design and cannot be drawn in advance. Due to the inherently emergent nature of qualitative research generally and naturalistic inquiry specifically, some elements of the study design changed and evolved from what was originally planned and proposed. I will discuss the parts of the study design that changed as well as give an explanation for these changes.

All participants were recruited on the Appalachian Trail. Originally I had wanted to encounter thru-hikers and possible participants while hiking and subsequently interview and observe them for a period of their hike. I began my first data collection hiking period with this recruitment plan in place. However, this plan changed due to the logistics of hiking and interviewing. Thru-hikers often hike in natural groups called “hiker bubbles.” Due to the fact that I was coming onto the AT at various points, I could not know where in time or space a bubble may be. Therefore, I instead recruited
participants in the trail towns where hikers would stop to eat, resupply, or stay in a hostel for a few days. This allowed me to stay in one place as each hiker bubble arrived. The bubbles tended to converge in each trail town since many hikers would stay for a few days. This gave me access to many more possible participants without the risk of hiking in between two bubbles and never seeing a group of hikers.

The way that I planned to interview and observe people also changed. I had originally planned to interview hikers while we hiked together on the trail and observe them during this period as well. Instead, interviews happened in trail towns with a few taking place at shelters on the AT. During the first two data collection periods, I was invited to hike with a group for a few days, during which I could observe and ask some follow-up questions. I decided not to hike with any participants from the final data collection period for observation purposes. This was the final hike to the summit of Katahdin and the conclusion of the thru-hike for participants; I did not want to impact their experience. It is also one of the longest stretches without resupply points on the AT, so I did not want to impact the speed at which participants needed to hike. I also decided to do significantly less participant observation than I had originally intended because the logistics of hiking with participants was difficult and the data I gleaned from participant observation was not as valuable as I had originally thought it would be.

Originally I had planned to do a follow-up interview with all participants from each recruitment episode once the hiking season had ended and the participants had had time to reflect on their experiences and settle back into their non-hiking lives. All participants were to be interviewed one time on the trail (at the beginning, middle, or
end), and then once after they had finished their hike. This would help to ameliorate the issue of not being able to follow the same group of hikers through their entire hiking experience. Unfortunately, due to the transient nature of the thru-hiker population I was unable to succeed in making contact with participants after our initial contact. I was able to secure one follow-up email from a participant, but this was not analyzed as data because I was not able to make contact with any other participants. The need to study the evolving relationships between space, place, identity, and power by interviewing participants at multiple points during nature experiences will be discussed in the implications and future research section of this chapter.

Time spent in the field also changed from what was originally proposed. Initially, two weeks of field work were planned for each of the three data collection periods, for a total of six weeks in the field. The data gleaned from participant observation was not as germane to the research questions as originally thought, therefore, less time in the field was needed. I ended up spending about one week in the field for each data collection period for a total of three weeks in the field. The interviews were very in depth and provided rich data, and my own experiences on the trail were very meaningful and significant. In addition, I was able to recruit more participants than I had originally intended to, which provided more data. This, combined with the need for less participant observation resulted in less time needed in the field.

Limitations

The goal of this research was to (a) examine the constructions of one’s nature experiences; (b) examine how these experiences in nature impact the actor’s place-
making and in turn are impacted by place; (c) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (d) examine how a person connects to nature and what their construction of nature is; and (e) examine how knowledge is generated during an informal nature experience. The findings which were discussed in Chapter IV and the discussion of those findings in this chapter have been influenced by certain limitations of this study. In this section, I will discuss these limitations.

The first limitation had to do with a change in the data collection design. As put forth in the previous section, some design elements of the study changed due to various factors. This included a change to the data collection protocol, namely the follow-up interviews. One of the goals of this study was to examine the construction of nature experiences during a long-term engagement in the outdoors, as well as to examine how these experiences in nature impact the relationships between space, place, and identity; the follow-up interviews would have helped to support findings related to those ideas. Due to the transient nature of much of the AT thru-hiking community, I was only able to reconnect with one participant for a follow-up email conversation. Therefore, discussion of place-making and discussion of the evolution of experience and connection to nature is limited to what participants related to me during their initial interview. The interview protocol was designed to elicit ideas about space, place, identity, and evolving experiences so I was still able to answer the research questions without the follow-up interviews.
A second potential limitation was the participant racial and gender homogeneity. My participants mostly reflected the demographics of thru-hikers as a group, which is made up of a higher percentage of Caucasian males than average. I was in fact lucky to have the diversity I did in my participant group since the demographics of thru-hikers are so male-centric and Caucasian oriented. However, this posed potential limitations in the perspectives that might be offered. The perspectives offered by my participant population were ultimately limited by the participants’ backgrounds and experiences. Given my larger aims for equitable nature experiences, I felt it important to note this in the limitations.

**Summary of the Study**

This dissertation explored hikers’ lived experience of nature while thru-hiking the Appalachian Trail. Using a qualitative design allowed me to examine connections to and conceptions of nature in more depth. Connection to nature as a precursor to environmental action is supported in the literature, as demonstrated in Chapter II. This requires researchers and practitioners to deepen their understanding of human-nature connectedness. Critical geography (Helfenbein, 2010) was used as a theoretical lens for this dissertation. In order to employ a critical geography, analysis of the evolution of space and how this impacts experience, power, and identity and is impacted itself by these same things must be undertaken (Helfenbein & Taylor, 2009).

In order to more deeply understand nature experience, connection to nature, and how space, place, and identity are related, a qualitative research method was employed. I utilized a naturalistic inquiry (Lincoln & Guba, 1985) research design. Data sources
consisted of in-depth interviews, observations, and researcher journaling. A constant comparative analysis method (Charmaz, 2006) was used in data analysis in order to gain a deeper understanding of nature experiences, nature as place, connection to nature, conceptions of nature, and experiential learning.

**Summary and Discussion of Emergent Themes**

Analysis of participant interviews, participant observations, and my participant observer research journal revealed themes that addressed the research questions of this study. The following discussion serves to summarize and connect the emergent themes to each other as well as to scholarship. Chapter IV presented the findings by research question for purposes of clarity, organization, and transparency in showing how each research question was addressed. However, in this chapter, the findings will be presented thematically in order to better show the connections between themes.

The experience of hiking the Appalachian Trail influenced the iterative and recursive relationships between space, place, power, and identity. Many participants had varying levels of awareness of nature connected to their identity. I conceptualized this idea of “awareness” as distinct from the sensual or physical act of being aware of one’s surroundings. “Awareness” of nature as a conceptual theme for this study refers to a person’s philosophical awareness of nature as a space, place, and/or idea, and was connected to participants’ identities and/or their inner selves. To sum up, I differentiated “inner awareness” from “outer awareness.” Dzhambov and Dimitrova (2014) measured awareness of nature experience in elderly visitors to an urban park. They defined awareness of nature experiences similarly as:
purposeful and conscious interaction with nature, a specific behaviour pre-formed as a cognitive representation of the “self” in a natural context, providing an internal replica of the previously experienced external natural world which guides people when they choose to visit an urban park. (p. 807)

Participants seemed to be aware of nature in varying degrees and at different scales. Where a participant was on this “awareness” continuum seemed to have a significant impact on their experience of hiking and experiences of nature. For example, contrasting TV Idol with Fortis revealed how much influence identity and nature awareness had on how one experienced a space/place, and gave insight into how space becomes place. Fortis brought his awareness of nature with him onto the Appalachian Trail and so his experience was more deeply nature oriented. The Appalachian Trail became a place of nature. TV Idol’s lack of nature awareness created an experience that was more social than it was about nature.

The inverse of identities influencing place-making was the finding of evolving identities. Many participants felt that the experience of hiking the Appalachian Trail changed them as a person. Participants internalized the experiences they had of the Appalachian Trail. In terms of awareness, participants’ identities and awareness of nature impacted their experience of the Appalachian Trail. In turn, experiences of the Appalachian Trail influenced participants’ identities. This revealed how the relationships between space, place, and identity are iterative and recursive.

The tenets and ideas of critical geography support these findings. Katz (1997) states that the lived experience of a place influences an actor’s thinking while also
informing their thinking. In other words, an actor makes meaning in a place while simultaneously expressing how they physically experience a place (Katz, 1997). The meaning ascribed to a thing comes from the thing being an object of experience, and yet precedes the experience itself (Burch, 1997). The idea of awareness as part of one’s identity influences experience and therefore influences how space becomes place. In turn, spaces are created, while simultaneously impacting those who dwell there (Helfenbein & Taylor, 2009). For some participants, this meant gaining confidence, seeing themselves in a different way, or perceiving themselves differently in terms of how they relate to nature. For other participants, this meant stripping away superfluous parts of their identity to reveal only the necessary essences of their identity.

Related to identity was the idea of being a visitor in nature. In the human-nature relationship, people often viewed nature in relation to themselves. Participants varied in whether they felt they were a part of nature, a visitor in nature, or separate from nature. Some participants identified as a visitor in nature while others identified as participants or part of nature. In other words, those that saw themselves as visitors in nature were observers of nature and those that saw themselves as a part of nature were participants in nature. Some participants saw themselves as only a part of nature, however, all participants who viewed themselves as visitors in nature also thought that they were a part of nature. This seemed to indicate that those who saw themselves as a visitor and a part of nature were both a participant and an observer. This might be due to the tension between humans having separated themselves from nature through “progress” and technology while having a biological history of being a part of nature. Participants who
felt that they were not a part of nature often felt separated by some element other than themselves, such as man-made objects and technology. Current standards of living and contemporary lifestyles are continuing to divide humans from the natural world (Hinds & Sparks, 2008), however, Wilson’s (1984) biophilia hypothesis postulates that our species’ survival was tied to nature and our ability to interact with it. Wilson argues that our attraction to certain life forms, habitats, and natural objects is due to our biological and genetic past.

Participants’ identities of being a part of nature versus being both a part of nature and also a visitor in nature influenced their experiences of nature spaces on the Appalachian Trail. For some, such as Silent Spring and Sparrow, being a visitor meant respecting nature as well as being environmentally responsible. For others, such as TV Idol, being a visitor meant feeling that some boundary separated people from nature. Participants who felt that they were a part of nature saw themselves as connected to nature and it seems like many of them saw all humans as a part of nature.

For many participants, there was an evolution of the relationships between space, place, and identity. Participants revealed that place-making occurred during their AT hike. Many participants found that the Appalachian Trail as a place became more meaningful to them after they experienced it. One tenet of critical geography is that space becomes place when the actor imbues said space with meaning from personal experience of the space (Helfenbein, 2010). This idea came across in a number of ways in my conversations with participants. Many participants expressed that the Appalachian Trail as a place became more meaningful to them after they experienced it. In other
words, the Appalachian Trail evolved from space into place. As hikers experienced the AT they were not only practicing meaning-making - in terms of lived experience - but place-making as well. As participants experienced the AT, the AT became a “place;” a place that had specific meaning and context. For many participants, the trail went from having little to no personal meaning before their hike, to being a very significant place after they experienced it. This occurred through lived experience of the trail itself, being a part of the social community, and being present physically and emotionally in the space.

In addition, for some participants, experiencing a thru-hike on the Appalachian Trail shifted their ideas about what a nature place is. This evolution occurred with varying degrees and not all participants experienced this change. Sparrow felt that her appreciation of nature became stronger, Nails’ experience on the trail helped her to form a definition of what nature was to her, and Fortis changed his views about desiring to own or possess nature. Many participants who reported a shift in their ideas about nature reported that their conception of nature become more narrow. This narrower conception of nature involved a removal of humans or man-made objects and was more wilderness oriented. HaluzaDelay (2001) found, similarly, that EE constructed around wilderness experiences might actually reduce environmentally responsible behaviors among suburban participants because these programs have a tendency to reinforce the separation of pristine nature - or wilderness - and the students’ home environments.

Participants defined nature in personal and diverse ways. Participants bounded/bordered nature as a space in various ways. This means that under these
participants’ definitions of nature, a space must include certain characteristics and any physical space that includes these characteristics is considered nature, whereas any space outside of this is not nature. Some participants bounded/bordered nature by separating “outdoor” spaces from “nature” spaces. Often the context of an outdoor space was different than the context of a nature space. The presence of “civilization” also served to separate the outdoors from nature. Definitions of nature were also variable, although many people separated nature from humans in their conceptions. Some participants’ definitions of nature used certain traits or elements to demarcate a nature space while other participants reported that they viewed nature spaces hierarchically, giving some types of nature spaces more value than others. For example, an old growth forest would have more value as a nature space than an urban park. One participant viewed nature as “Creation” and reported that it was something gifted to humans by God. A study on early childhood educators’ perceptions of nature also found that participants reported similar definitions. The authors found that participants’ open-ended definitions of nature revealed a variety of conceptualizations. Some definitions were restrictive, for example, limited to things outside. Other definitions were inclusive and all encompassing. Some participants excluded people as part of nature, while others unequivocally included people. A few participants identified spiritual aspects of nature, with some specifically referring to nature as “created by God” (Torquati, Cutler, Gilkerson, & Sarver, 2013).

Thru-hiking the Appalachian Trail is a significant experience in and of itself and is a highly personal journey. This being said, there were a number of themes that emerged in terms of hikers’ experiences on the trail. First, most participants described
the experience of thru-hiking as being highly social. In conversations with participants there was a distinct separation between social experiences and nature experiences. These ideas did not seem to go together in participants’ minds. The social aspect of the thru-hiking experience seemed to grow out of the social community that surrounds the Appalachian Trail. This community is made up of present, past, and future hikers, nature lovers, conservationists, towns, businesses, AT clubs, and AT enthusiasts. Even participants who were seeking a “wilderness” experience were surprised by how much they ended up valuing the social aspects of their experience. Relationships formed on the trail were very meaningful to participants. Participants felt that they shared the experience of through hiking with other hikers and this helped them forge bonds quickly with people they just met.

This social aspect of experience is also what facilitated learning on the trail. Many participants thought that learning had occurred during one or more portions of the hiking experience (e.g. researching, planning, and hiking), and participants described the process of learning as being highly social in nature. Some participants began learning from the hiking community before their experience began by using blogs and online trail journals to prepare and choose gear. Thru-hikers shared the lived experience of hiking the Appalachian Trail and they learned together on the trail as they hiked. However, this learning did not seem to be intentional. None of the participants stated that a reason they chose to thru-hike the AT was to learn about any subject in particular, other than to reflect on their life or self. Despite participants reporting that they had not intended to learn, participants frequently described learning that took place as they hiked the AT.
This points to nature as a place where learning can and does occur. Participants learned from others as well as taught others. Different hikers were considered “experts” in various subjects so everyone had something valuable to share and teach. Although learning was unexpected, many participants seemed to enjoy this aspect of their experience. The elements involved with this social learning on the AT shares many of the qualities of being a community of practice (Lave & Wenger, 1991). The hiker community shared enthusiasm for the experience of thru-hiking as well as dedication to other members of this social group. The actors in this group then learned together about the experience of hiking as they interacted during the experience.

This social learning resulted in a variety of content/subjects that participants reported learning. Participants reported learning about outdoor/survival skills, organism identification, environmentalism, science, and self. Lived experience on the trail as well as being a community of practice provided numerous informal learning opportunities for participants. One powerful example of learning on the trail is that some participants began to realize the effect that human behavior can have on the environment. The experience of seeing trash and environmental degradation along the trail caused by fellow hikers was a very significant environmental learning experience for some participants. Another prominent subject that participants learned about was the science of weather. Weather was a significant factor in participants’ thru-hikes because it had such an impact on their everyday life on the trail. Being able to predict the weather made a thru-hike more enjoyable and also safer, therefore being able to learn this skill had a lot of value for thru-hikers. The idea of learning from nature has long been extolled in scholarship, yet
there is still a higher value placed on formal avenues of education. The nature study movement of the early 1900s emphasized learning from tangible objects as well as from the natural world and looked to interest as the motivating force within the student (Bybee & DeBoer, 1994). Nature study is something that happened on the AT without any formal structure or intent. It occurred naturally as a result of experience and social interaction.

Related to the subjects that participants learned about was the theme of experiences of nature and the outdoors. Participants had different types of nature experiences including weather experiences, views, and organisms on the trial. One type of nature experience that came up again and again was the experience of weather. Every participant mentioned the weather at some point in talking about their experiences. For a number of participants this experience had a negative connotation, but for others it showcased that nature was a powerful force. For some participants, seeing other organisms in their natural habitat was a powerful nature experience and allowed them to feel like a part of nature, although a few participants felt as if they were intruding upon nature. Both Chhetri, Arrowsmith, and Jackson (2004) and Hully IV and Stewart (1995) looked at landscape components of nature / the outdoors. These studies uncovered that there is a quality element to a nature experience, both showing that vistas, or views, make an experience more enjoyable for many hikers. Participants on the AT also valued different experiences differently. For example, some participants found views to be very enjoyable while other participants did not mention views.
Thru-hiking the Appalachian Trail is a four to six month commitment, and involves at least some pre-planning. Thru-hikers on the AT are living their daily lives mostly in the outdoors and are exposed to the elements and weather. Some people might find that kind of experience daunting or unpleasant. This is not an experience that everyone would choose to do. Making the choice to thru-hike the AT was therefore a decision that revealed elements of participants’ identities, comfort in the outdoors, and connection to nature or the outdoors. From my participants, I found that there were many varied reasons for choosing to undertake this intense nature experience, as well as different life paths that led people to the AT. However, there were also many commonalities among participants. In my conversations with participants about the paths that brought them to the AT and the thru-hiking experience, they highlighted significant life experiences (see Tanner, 1980) and formative influences, as part of their reasons for hiking the AT. Time spent outdoors as children was an exceptionally important experience in terms of leading participants to the Appalachian Trail. All participants hiking the trail by personal choice had spent time playing outside as children. When talking about people who had influenced participants’ decisions to hike the AT, there was a much stronger influence from males than females. Many participants mentioned fathers and grandfathers and only one participant mentioned their mother. A study on gender and forestry careers in Sweden found that there was a hegemonic masculinity and female foresters appeared to need a male mentor to enter the field (Lidestav & Sjölander, 2007). An SLE study on outdoor childhood play found that women who reported playing
outdoors often referred to themselves as “tomboys” (Vadala, Bixler & James, 2007). This reveals the male-centric nature of outdoor recreation.

The theme of power manifested in various ways for different participants. Power as a structure was superimposed over the ideas of space, place, and identity. Some participants viewed humanity as a powerful force that acted upon nature. Therefore, it was acceptable to believe that human existence and human experience took precedence over that of nature. Some participants revealed that with this power came the responsibility of care. Although stewardship can be a positive environmental attitude or behavior, the philosophical underpinnings of stewardship can present a number of troubling issues in terms of humans’ relationship to the earth and other organisms (Palmer, 2006). One of the goals of environmental education is to create persons who care for and about the environment, but it is paramount that we understand the different ways in which care can be enacted. One study explored visions of nature among Christians, Muslims, Native Americans, Buddhists, and secularists in a small city in British Columbia, Canada. The authors found that different groups had different ideas of what the human-nature relationship should be. All groups rejected the idea that humans wield hierarchical power and mastery over nature. Christians and Muslims kept to the stewardship image of the human/nature relationship, while Buddhists and Native Americans considered themselves to be participants in nature. The secularists combined different aspects of each of these approaches to form their viewpoints (De Groot & Van den Born, 2007). The findings about power from this study are similar to the views expressed by participants in De Groot & Van den Born’s (2007) study.
Implications for Research

In Chapter IV, I presented the participants’ lived experiences of thru-hiking the Appalachian Trail. In this section, I elaborate on how the findings from this study support, add to, and refine the current literature on topics including experiences of nature, the outdoors, and environmental education, significant life experiences, connection to nature, and critical geography. The setting of the Appalachian Trail is a unique research site, but it offered a rich site to understand how different people experience the outdoors and what it means to connect to nature. According to Lincoln and Guba (1985), the person seeking to make the application to a new setting has the responsibility of transfer or generalizability. As the researcher is only familiar with the research setting, their responsibility is to provide a rich description of the setting in order for another person to make a judgment about whether another setting is similar enough to transfer findings (Lincoln & Guba, 1985).

This study focused on the holistic nature of experience, as well as on place-making, and the human-nature connection. It informs environmental education research and practice, as well as expands the goals of EE. It enriches the discourse on what it means to be environmental and widens our conceptions of what nature is. The findings of this study are valuable in helping researchers and practitioners best utilize environmental education and design EE programs. In order to improve environmental education, a greater understanding of how people experience, connect to, and learn in nature was needed. This study allowed us to begin to widen our conceptions of what it means to be environmental and the paths that lead to being an environmental individual.
Goals and Purposes of EE

The Tbilisi Declaration established three overarching goals of EE and these have provided much of the foundation for what has been done in the field of EE since 1978 (NAAEE, 2002). These three goals were listed as follows:

To foster clear awareness of and concern about economic, social, political, and ecological interdependence in urban and rural areas; to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment; and to create new patterns of behavior of individuals, groups, and society as a whole towards the environment (UNESCO, 1978).

Both the Tbilisi Declaration and the Belgrade Charter have continued to be important roots for the field (NAAEE, 2002). The findings of this study supports these goals in a number of ways. It provides a greater understanding of the paths that bring people to interact intensely with nature and the outdoors and it also provides a rich description of the lived experience of being in/with nature. Choosing to interact with the outdoors and with nature is an example of a pattern of behavior which could foster concern for the environment. Research in this area provides the field of EE with valuable insight into how students and adults might experience nature programs and what kind of experiences might produce environmentally caring individuals or individuals who seek out more nature experiences. Backpacking and hiking are an example of ways in which a person can develop values, attitudes, and commitment to the environment which ties directly to the goals of the Tbilisi Declaration (UNSCO, 1978). The findings also offer ways in
which we can grow and develop the goals of the field by investigating the ways in which people connect with the environment beyond activism. Furihata, Ishizaka, Hatakeyama, Hitsumoto, & Ito (2007) considered nature experience as both a significant life experience when experienced in the past, and as a responsible environmental behavior when sought out in the present. Since we have learned that environmental sensitivity is a more important precursor to behavioral change in terms of environmentally responsible behavior, then the findings form this study can provide insight into what environmental sensitivity might look like in action. Participants chose to hike the AT for many reasons, but all but one participant cited at least part of their reasoning was to seek a nature experience in some form. All participants reported engaging in at least one environmentally responsible behavior, such as recycling, practicing leave no trace, or changing their consumption habits.

Given that the literature indicates that sustained contact with a given place best cultivates children’s environmental knowledge and concern (Hart, 1997; Sobel, 1996; Vaske & Kobrin, 2001), current EE practices may not be the most effective pedagogical approach to creating genuine environmental concern. In a recent study, HaluzaDelay (2001) found that EE built around wilderness experiences might actually diminish environmentally responsible behaviors among suburban participants because these programs tend to reinforce the separation of pristine nature and the students’ home environments (Fisman, 2005). Many participants in the current study reported that their definitions and conceptions of nature became narrower, more wilderness-oriented, and less inclusive of humans. This supports the idea that current EE practices of immersing
children in nature spaces which limit their conception of what counts as nature may actually diminish environmental connection. Human civilization cannot be separated from nature and the goals of environmental education should encompass different types of nature spaces as well as different spatial contexts of human-nature overlap. If the only type of nature space that is valuable in “wilderness,” than the majority of people living in urban areas will feel disconnected from nature and the environment. The goals and purposes of EE must be shifted to encompass a broader conception of nature if we are to create environmentally active and aware citizens.

**Significant Life Experiences**

The body of Significant Life Experiences (SLE) research explores experiences and influences that environmental individuals report as being significant to their environmentalism. According to the literature, nature experience is known to be important in producing citizens who are environmentally active (Tanner, 1980). Within all of the SLE literature, childhood experience in nature was found to be important in adult environmentalism (Arnold, Cohen, & Warner, 2009; Chawla, 1999; Corcoran, 1999; Furihata, Ishizaka, Hatakeyama, Hitsumoto, & Ito, 2007; Hsu, 2009; Palmer et al, 1998; Palmer & Suggate, 1996, Palmer, Suggate, Bajd, &Tsaliki, 1998; Palmer, Suggate, Robottom, & Hart, 1999; Sward, 1999; Tanner, 1980). One aspect of this study was to examine the significant life experiences and formative influences which inspire adults to thru-hike the Appalachian Trail.

In this study, it was found that childhood experience in nature was an important factor in participants’ decisions to undertake an intense nature experience. This is in line
with what the current SLE literature reveals. However, the results of this study are also novel to the SLE literature in that Appalachian Trail thru-hikers have not been invited to participate in this type of research until now. The act of long-distance hiking is not necessarily equivalent to being an environmental activist, however, given that environmental sensitivity and connection to nature are thought to be precursors to action (Hungerford & Volk, 1990) it is vital that we include this population in SLE research. Interviews with participants revealed that people who chose to thru-hike the AT had spent time playing outdoors as children. Only one participant was not hiking by her personal choice and she was also the only participant who reported not spending a significant amount of time outside as a child. This suggests that some childhood experience outdoors or in nature helps people to feel comfortable in outdoor environments later in life.

SLE studies have for the most part, looked at the formative influences of environmental educators, environmental workers, and activists. There is however, debate among scholars in this area about which participants make the best subjects for these types of projects. Tanner (1998) argues that it is a fundamental error to study environmental educators or other populations, preferencing environmental activists above all other environmental individuals. He uses the goals of environmental education, put forth in the Belgrade Charter and Tbilisi Declaration of promoting an educated citizenry which would work actively toward a final goal of sustaining a diverse, beautiful, and resource-rich planet for future generations, to support his argument. Not all researchers agree with this reasoning. Numerous SLE studies have encompassed environmentalists
that are not considered by Tanner’s (1998) definition to be activists. Payne (1999) takes a different approach by arguing that the democratic aims of education give a broader picture of environmentalism which includes activism, but also includes environmental awareness, sensitivity, and commitment. He believes that SLE research should broaden, not narrow, its scope of understanding in order to encompass the range of paths toward different environmental outcomes in terms of different individual’s identities and construction of experiences. “There is a place in research for both ‘right’ and ‘wrong’ subjects if we wish to know more about the ‘democracy of experience’ and less about curriculum models that prioritize some experiences because they might cause some to be active” (p. 370).

The participants of this study could be considered both “right” and “wrong” subjects. The findings showcase a democracy of experience which was called for by Payne (1999). Participants were found to be environmentally active and/or aware at various levels. They were also aware of nature as a space around them at various levels. For example, TV Idol chose to thru-hike the AT for non-environmental reasons and was not aware of nature around him, yet he reported having many of the same SLEs as other participants who were very aware of nature and had a strong connection to nature. This shows that curriculum models that prioritize some experiences because they might influence someone to become environmentally active or sensitive might not be successful.

This study examined the SLEs of, and current reasoning for, Appalachian Trail thru-hikers choices to engage in an intense nature/outdoor experience. This takes SLE
research beyond activists, beyond environmental educators, and beyond environmental workers to study participants who want to connect with the environment or have a nature/outdoor experience for reasons other than, or in addition to, activism. This research reveals how different individuals construct and reconstruct environmental/outdoor experiences by looking at SLEs in tandem with current environmental/outdoor experiences. Furihata, Ishizaka, Hatakeyama, Hitsumoto, & Ito (2007) considered nature experience as both a significant life experience when experienced in the past, and as a responsible environmental behavior when sought out in the present. This study also considered environmental experience in much the same way by claiming that seeking a nature experience is an environmental behavior. The behavior of seeking an environmental/outdoor experience through engaging in an intense nature experience, such as hiking the Appalachian Trail, could be an expression of environmental sensitivity or connection to nature. Environmental sensitivity and connection to nature are supported in the literature as being more important than knowledge of environmental issues in terms of environmental activism (Hungerford & Volk, 1990).

**Experience In/Of Nature**

Both Chhetri, Arrowsmith, and Jackson (2004) and Hully IV and Stewart (1995) looked at landscape components of nature / the outdoors. These studies uncovered that there is a quality element to a nature experience, both showing that vistas, or views, make an experience more enjoyable for many hikers. However, both studies looked at discreet pieces of landscapes and how these elements influenced visitor experiences, but nature
experiences occur in places which are whole entities and multiple factors can influence one’s experience. Furthermore, both of these studies do not reveal the nature of a hiker’s outdoor experience.

This study enabled a deeper examination of hikers’ experiences through in depth, qualitative interviews. Analysis of interviews with participants found that people have numerous types of experiences in and with nature. Participants experienced other organisms, landscapes or views, and weather. However, the overall lived experience was much richer and included elements that were less nature oriented. Social, emotional, and learning experiences were also central to participants’ overall thru-hiking experience. The social aspect of the experience was important for most thru hikers and made up a large piece of their overall experience. Nature experiences were different for different participants. Some participants experienced other organisms such as animals and plants in positive ways whereas other participants experienced these same things in a negative way.

A study on how visitors’ perceptions of a trail environment affect their experiences was done on the Appalachian Trail in Great Smoky Mountains National Park (Dorwart, Moore, & Leung, 2010). Dorwart, Moore, and Leung (2010) describe the multi-faceted nature of experience with their phrase “web of experience” (p. 34). The authors argue that it is important to understand this web because a hike on the AT can bring up childhood memories of family trips, and “experiences in natural settings can create or strengthen a host of other interwoven strands and have long-term effects on a person’s experiences as well as how that individual views and acts toward nature in the
future” (p. 34). The authors conclude that visitors’ awareness, inclinations, and experiences were multifaceted. They recommend that the complex association of an entire person to the environment must be examined to understand outcomes of human interaction with the natural world (Dorwart, Moore, & Leung, 2010).

This study also examined AT hikers and the interwoven strands of the participants’ web of experiences, such as childhood experiences, formative influences, AT hiking experiences, place-making, and connections to and conceptions of nature. Using AT thru-hikers instead of day hikers as participants, as well as having extended contact through in-depth interviews with participants served to answer Dorwart, Moore, & Leung’s (2010) call for a deeper examination of the human-nature experience and the human nature-connection. Findings revealed that the human nature connection is complex. Participants had varying ideas about whether they were visitors in nature, a part of nature, or both. Depending on how people related themselves and other humans to nature impacted how they experienced nature; either as a participant in nature or an observer.

**Learning**

The environment can offer educational opportunities to adults as well as to youth. Long distance hiking, camping, birding, and other outdoor pursuits provide an arena for learning outdoor skills, organism identification, ecology, and even an appreciation for nature. Environmental education has mainly focused on relaying factual knowledge to, and changing patterns of behavior of, a non-adult audience (Hougen, 2009). However, this dissertation found that adults can and do learn in, from, and about nature.
Participants reported learning a number of subject including science and environmentalism. Although participants had not intended to learn on the trail and did not have a pre-ordained purpose to learn, learning took place through experience as well as through social avenues. An historical analysis of environmental adult education (EAE) by Haugen (2009), found that environmental education messages were not reaching a diverse audience in terms of age, and as a result, the same students from the same socio-economic class were receiving the same instruction repeatedly. This inability to reach new audiences led to a decrease in the amount of genuine behavioral change that might have been possible (Haugen, 2009). The current study examined adult participants in an environmental context which begins to shed light on this population of environmental learners.

Sandell and Oehman (2010) write about the educational potentials of encounters with nature in terms of Swedish outdoor environmental education. They argue that shifting the approach of EE away from nature encounters and toward more pluralistic and political approaches would erase the educational potentials of nature experiences. The authors relay that if the quality of nature experience is to be taken seriously, a greater understanding of the contextual and dynamic concept of nature is necessary (Sandell & Oehman, 2010). This dissertation supports the idea that nature experiences have educational potential. Participants thru-hikes the AT and through their experiences on the trail in nature, were able to learn about a variety of subjects.

In the outdoor environmental education of children, Auer (2008) argues that there is a strong emphasis on hands-on learning and sensory perception, but that this is largely
absent in the environmental education of older students. If more sensory learning were to be included in the environmental education of college-age students, conventional learning modalities such as empirical observation could be reinforced through the explicit use of the external senses. External senses such as taste and touch could also act to break down dualistic conceptions of ‘people’ and ‘nature’ by bringing together knowledge and feeling (Auer, 2008). Participants in this study learned about various subjects through hands-on learning and sensory perception through the lived experience of thru-hiking the AT. However, this did not seem to break down the dualistic conceptions of “people” and “nature” and in some cases, this conception was strengthened. In order to break down the barrier between human civilization and the environment, experiential and sensory learning might need to encompass all different types of nature spaces.

The findings from this study show that learning took place in an informal, experiential, and social way. The Appalachian Trail thru-hiker community seems to exhibit components of being a community of practice (Lave & Wenger, 1991). The hiker community shares enthusiasm for the experience of thru-hiking as well as dedication to other members of this social group. The actors in this group then learn together about the experience of hiking as they interact during the experience. All participants who mentioned learning talked about it occurring in a social way. Participants learned about subjects such as leave no trace, environmental awareness, plant and animal identification, backcountry skills, survival skills and science concepts such as water treatment, weather prediction, geology, and ecology.
**Connection to Nature**

The literature reveals that pro-environmental behavior is positively associated with the strength of emotional connection towards the natural environment (Hinds & Sparks, 2008). A number of studies use quantitative measures and questionnaires to investigate connectedness to nature. Dutcher, Finley, Luloff, and Johnson (2007) developed a sociometric scale in order to operationalize connectivity with nature. A study done in Germany by Bruegger, Kaiser, and Roczen (2011) analyzed many of the connectedness to nature measures available when developing their Disposition to Connect with Nature Scale. They found that scales which are meant to measure connectedness to nature, environmental identity, or inclusion of nature in one’s self seem to all measure the same concepts.

This study looked at connection to nature using qualitative methods. Human connection to nature is complex and subjective. One theme which emerged from my conversations with participants is that in the human-nature relationship, people often view nature in relation to themselves. Participants varied in whether they felt they were a part of nature, a visitor in nature, or separate from nature. Many participants also felt that their connection to nature was different on the trail versus in everyday life. Some participants saw themselves as only a part of nature, however, all participants who viewed themselves as visitors in nature also thought that they were a part of nature. This seemed to indicate that those who saw themselves as a visitor and a part of nature were both a participant and an observer. This might be due to the tension between humans having separated themselves from nature through “progress” and technology while
having a biological history of being a part of nature. Participants who felt that they were not a part of nature often felt separated by some element other than themselves, such as man-made objects and technology. Current standards of living and contemporary lifestyles are continuing to divide humans from the natural world (Hinds & Sparks, 2008), however, Wilson’s (1984) biophilia hypothesis postulates that our species’ survival was tied to nature and our ability to interact with it. Wilson argues that our attraction to certain life forms, habitats, and natural objects is due to our biological and genetic past. This study reveals the tension that many participants felt between being separated from nature by contemporary lifestyles while also yearning to return to state in which they were more interrelated with the environment. This reveals a need to look more deeply at human-nature relationships and to explore the tensions between being a part of the environment as a biological organism related to other life on Earth and as a species which strived to separate itself from that same environment.

**Critical Geography**

Critical geography explores the relationships between space, place, identity, and power (Helfenbein, 2010). Many participants had varying levels of awareness of nature which was connected to their identity. I conceptualized this idea of “awareness” as distinct from the sensual or physical act of being aware of one’s surroundings. “Awareness” of nature as a conceptual theme for this study concerns a person’s philosophical awareness of nature as a space, place, and/or idea and was connected to participants’ identities and/or their inner selves. Dzhambov and Dimitrova (2014)
measured awareness of nature experience in elderly visitors to an urban park. They defined awareness of nature experiences similarly as:

- purposeful and conscious interaction with nature, a specific behaviour pre-formed as a cognitive representation of the “self” in a natural context, providing an internal replica of the previously experienced external natural world which guides people when they choose to visit an urban park. (p. 807)

Participants seemed to be aware of nature in varying degrees and at different scales. Where a participant was on this “awareness” continuum seemed to have a significant impact on their experience of hiking and experiences of nature. For example, contrasting TV Idol with Fortis revealed how much influence identity and nature awareness had on how one experienced a space/place as well as how space became place. Fortis brought his awareness of nature with him onto the Appalachian Trail and so his experience was more deeply nature oriented. The Appalachian Trail became a place of nature. TV Idol’s lack of nature awareness created an experience that was more social than it was about nature. The Appalachian Trail became a social place.

For many participants, there was an evolution of the relationships between space, place, and identity. Two themes emerged from the data that addressed this idea. The first theme is place-making. This theme comprises two different aspects of place-making. First, many participants found that the Appalachian Trail as a place became more meaningful to them after they experienced it. Second, for some participants, experiencing a thru-hike on the Appalachian Trail shifted their ideas about what nature is. The second theme is that many participants felt that the experience of hiking the
Appalachian Trail changed them as a person. These findings show how critical geography can give environmental education researchers a tool to examine nature as a space/place and how people connect and interact with nature spaces.

The tenets and ideas of critical geography are supported by these findings. Katz (1997) states that the lived experience of a place influences an actor’s thinking while also informing their thinking. In other words, an actor makes meaning in a place while simultaneously expressing how they physically experience a place (Katz, 1997). The meaning ascribed to a thing comes from the thing being an object of experience and yet precedes the experience itself (Burch, 1997). Critical geography literature does not connect with environmental education literature, however the finding of this study show how conversations about human-nature relationships and nature as place can enrich our understandings of the relationships between space, place, and identity.

**Implications for Future Research**

In this section of implications for future research, I will be discussing ideas for future research which will support my future line of inquiry. This dissertation acts as a starting off point from which I can explore various aspects of environmental education, such as the human nature connection, nature experiences, and learning in and about nature, the environment, and ecology. Because this study encompassed multiple aspects of environmental education, I can move in a number of directions from this point.

One of the most interesting findings from the study was the idea of nature awareness. Participants were aware of nature around them in varying degrees. This idea of awareness might be similar to the concept of environmental sensitivity which is an
important precursor to behavioral change. Scholarship on this construct, in the way it was conceptualized in this study, is very limited. Although Dzhambov and Dimitrova (2014) measured awareness of nature experience in elderly visitors to an urban park and defined awareness of nature experiences similarly as:

- purposeful and conscious interaction with nature, a specific behaviour pre-formed as a cognitive representation of the “self” in a natural context, providing an internal replica of the previously experienced external natural world which guides people when they choose to visit an urban park (p. 807);

they used a likert style questionnaire and their participants did not define nature or nature experience for themselves. The authors also connected awareness to health anxiety in elder participants, and not to constructs such as environmental sensitivity. More research is needed in order to further flesh out this idea of awareness and how it is related to environmental sensitivity, connection to nature, and place-making in nature. This idea of awareness also needs to be investigated in terms of environmental education nature programming and curriculum. There is an assumption that when environmental educators take students into nature, that they are having a nature experience. However, the findings of this study reveal that immersion in a nature space does not always constitute an awareness of nature on the part of the participant.

Another component of this study that I would like to investigate further is the theoretical lens of critical geography. This lens offers environmental education researchers tools and language to investigate the connections between space, place, identity, and power. As one of the goals of this study was to examine the construction of
nature experiences during a long term engagement in the outdoors as well as to examine how these experiences in nature impact the relationships between space, place, and identity, follow-up interviews would have helped to support findings relating to these ideas. Due to the transient nature of much of the AT thru-hiking community, I was only able to reconnect with one participant for a follow-up email conversation. Therefore, discussion of place-making and discussion of the evolution of experience and connection to nature is limited to what participants related to me during their initial interview. In a future study, I would like to look specifically at the evolving relationships between space, place, and identity throughout a long term engagement with nature or the outdoors. The literature of critical geography is not centered on environmental education so this future research could add to both the existing literature on critical geography as well as existing literature on identity and place-making in environmental education.

A third avenue that emerged from this study is nature connection and conceptions. I would like to look at these two concepts with different populations. Most of environmental education centers on youth, therefore it is important to examine how children connect to and conceptualize nature. I would also like to look at these two concepts from urban, suburban, and rural perspectives. Findings from this study revealed that participants had varying ideas about what defined nature as a space. Many participants separated nature from humans in their definitions. This has implications for how we, as a society, think about urban nature spaces as well as how we decide what is worthy of conservation and protection. Therefore, more research is needed on how people conceptualize and connect to different types of nature spaces.
Summary

This qualitative study examined nature experiences, how these experiences in nature impact place-making and in turn are impacted by place, why someone would choose to engage in an intense nature experience (in connection with significant life experiences), how a person connects to nature and what their construction of nature is, and examined how knowledge is generated during an informal nature experience.

Analysis of data revealed themes which addressed the research questions and purposes of this study. The experience of hiking the Appalachian Trail influenced the iterative and recursive relationships between space, place, power, and identity. Many participants had varying levels of awareness of nature. There was a clear distinction for many participants between being a visitor in a nature space and being a part of nature. Power manifested in various ways for different participants.

There were a number of themes that emerged in terms of hikers’ experiences on the trail. Participants described the experience of thru-hiking as being highly social. Participants had different types of nature experiences including weather experiences, views, and organisms on the trial. Many participants thought that learning had occurred during one or more portions of the hiking experience, and there were certain types of content/subjects that participants reported learning. Many participants described the process of learning as being highly social in nature.

From my participants, I found that there were many varied reasons for choosing to undertake this intense nature experience, as well as different life paths that led people to the AT. However, there were also many commonalities among participants. In my
conversations with participants about the paths that brought them to the AT and the thru-hiking experience, they highlighted significant life experiences (see Tanner, 1980) and formative influences, as part of their reasons for hiking the AT.

In the human-nature relationship, people often view nature in relation to themselves. Participants varied in whether they felt they were a part of nature, a visitor in nature, or separate from nature. Many participants also felt that their connection to nature was different on the trail versus in everyday life. Participants defined nature in personal and diverse ways. Participants bounded/bordered nature as a space in various ways and their definitions of nature were also variable, although many people separated nature from humans in their conceptions.

For many participants, there was an evolution of the relationships between space, place, and identity. Many participants found that the Appalachian Trail as a place became more meaningful to them after they experienced it. For some participants, experiencing a thru-hike on the Appalachian Trail shifted their ideas about what nature is as well as changed them as a person.

The results of this study have a number of implications for various area of scholarship as well as future areas of research. This research is needed to advance the field of environmental education in terms of experience, place-making, and nature connection. In closing, I leave you with a poem by Henry David Thoreau, a father of modern environmentalism.

**Nature**

_O Nature! I do not aspire_  
_To be the highest in thy choir, -_
To be a meteor in thy sky,
Or comet that may range on high;
Only a zephyr that may blow
Among the reeds by the river low;
Give me thy most privy place
Where to run my airy race.

In some withdrawn, unpublic mead
Let me sigh upon a reed,
Or in the woods, with leafy din,
Whisper the still evening in:
Some still work give me to do, -
Only - be it near to you!

For I'd rather be thy child
And pupil, in the forest wild,
Than be the king of men elsewhere,
And most sovereign slave of care;
To have one moment of thy dawn,
Than share the city's year forlorn.
~Henry David Thoreau
APPENDICES
APPENDIX A

RECRUITMENT SCRIPT
Appendix A

Recruitment Script

The Nature of Nature: Hikers’ Experiences of Nature and the Outdoors on the Appalachian Trail

Vanessa A. Klein

“You are being invited to participate in a dissertation research study. This research project will investigate hikers' experiences of nature while thru-hiking the Appalachian Trail. I would like to hike with you for a short time as well as talk with you about your experiences along the way. If you are interested I would love to explain the project further.”

“If you choose to participate in this project, I would like to interview you about 1) Your hiking experiences; 2) Your connection to nature and the outdoors; and 3) Your reasoning for hiking the AT and what former outdoor experiences you might have had. Observations of your experiences while hiking will also occur.”

“There will be two sets of interviews over the period of the study. The first interview will take place on the Appalachian Trail, and the second will take place over the phone after your hike is finished.”

“If you choose to participate, each of the interviews will take less than two hours. The period of observation will not exceed two weeks, and you hiking trajectory and pace will still be completely up to you.”

“Your confidentiality will be protected through the use of pseudonyms in all written products of the research.”

“Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time. Participating or not is completely up to you.”

“Thank you for your time and consideration of participation. If you would like to participate you will need to read and sign the consent forms. Please let me know if you have any questions. Thank you so much for your time and consideration.”
APPENDIX B

INTERVIEW PROTOCOL AND QUESTIONS
Appendix B

Interview Protocol and Questions

First Interview – Round One – Interviewed Appalachian Trail thru-hikers at the beginning of their hike near the beginning of the trail in Damascus, VA. As this was an open-ended, semi-structured, conversational interview, these questions will served as scaffolding for more probing questions. However, all questions remained within the subject of the basic questions and probing questions reflected the interviewees’ answers to the main questions. In addition, some interviews did not take place all at once, but could were broken into separate sessions.

Background
(1) Tell me a little bit about your background – Describe where you are coming from geographically as well as where you are in life.
(2) What do you do for a living and how did you fill your days before beginning your hike?
(3) What type of environment did you grow up in (urban, rural, suburban)? As a child, did you spend a significant amount of your time indoors or outdoors?

Significant Life Experiences, Formative Influences, and Reasoning for Hiking the AT
(1) Why are you thru-hiking the Appalachian Trail? Have you ever done it before?
(2) What prior nature / outdoor experiences have you had?
(3) Can you identify any experiences that led you to want to undertake this hike?
(4) Are there any past influences in your life (such as people, places, books, media) that you credit for causing you to undertake this hike?
(5) What would you say is the most significant previous experience or past influence that has made you decide to hike the AT?
(6) Would you consider yourself to be environmental? How would you define “environmentalism”? Do you think you exhibit any environmentally responsible behaviors? Can you think of any examples?
(7) Are there any previous experiences that you have had in life that made you this way?
(8) Are there any past influences in your life (such as people, places, books, media) that you credit for making you this way?

Expectations, Experiences & Learning
(1) What were you thinking that hiking would be like before you started planning? What were your expectations?
(2) How did you plan and prepare for this hike?
(3) What did you think hiking would be like after you planned and prepared for your hike?
(4) Now that you have started your hike, do you feel that it is different than you expected? How so? Do you have different expectations for the rest of your hike? What are you expecting?
(5) What interesting experiences have you had on your hike so far?
(6) Have you had any interesting experiences with / of nature so far? What kind of experiences have you had in encountering the different environments and habitats of the AT?
(7) Have you had any contact with different plants or animals? What was that like?
Now that you have begun your hike, how has your experience been changing, if at all? What would you say has been the most significant experience you have had on the AT so far?

If you could describe your AT experience in one or two words what would it/they be?

Do you think you have learned anything so far from your planning or hiking?

How is learning on the trail different from more formal learning environments?

Do you think you have learned anything about nature? What are some examples and how did you learn about these things?

Do you think you have learned anything scientific? What are some examples and how did you learn about these things?

Do you think you have learned anything environmental or about being environmental from hiking? What are some examples and how did you learn about these things?

Connections to & Conceptions of Nature

How would you define the term “nature”? What does the word mean to you?

Are the words “nature” and “outdoors” different? What is different or similar about them?

Can you give me some examples of nature and / or the outdoors?

Is a vacant lot or an old corn field different from Yellowstone National park? How so?

What kind of environment is the Appalachian Trail to you?

What is your relationship to plants and animals while you are on the trail? Is it a different relationship from the ones you have in everyday life or when you are indoors?

How do you see yourself in relation to the physical environment such as rocks, water, or air?

How do you see the relationship between living things, such as plants and animals, and the physical environment, such as rocks, water, and air?

Some people feel like that have an innate or instinctual desire to relate to or experience the natural world while others don’t feel so strongly about that. What do you think? Why do you feel this way?

How do you interact with aspects of the natural world that you find displeasing?

Do you see yourself as a part of nature or separate from nature?

Do you notice nature around you even when you are in an urban environment?

How would you identify yourself as a thru-hiker on the AT?

How do you identify yourself in terms of nature and the outdoors?

Has preparing for this hike or hiking the trail changed the way you see yourself?

While you are hiking, do you see yourself as being in nature, being a part of nature, or no different than when you are indoors or living your day to day life?

Do you see humans as a part of nature, or separate from nature?

Do you think your identity influences how you experience the hike? How so? Can you think of an example?

What is the Appalachian Trail? How would you define it as a space or place different from or similar to other spaces or places?

How would you define the terms “space” and “place” in terms of one another and how would you categorize the AT in relation to those definitions?

Did you feel a connection to the AT before you began your hike? Has this changed since you have been hiking?
(10) Would you be upset or troubled if something were to damage the AT? Do you think you would ever be interested in helping to conserve the AT and its habitats? How might you want to do this?

(11) Do you think you have any power over what happens on, or to, the AT? Who does have power? Does nature or the AT have any power of its own?

(12) What kind of interactions have you had with other hikers so far?

Thank you very much. May I contact you when you are finished hiking in order to follow up with the second interview?

First Interview – Round Two – Interviewing Appalachian Trail thru-hikers in the middle of their hike near the midpoint of the trail near Harpers Ferry, West Virginia. As this was an open-ended, semi-structured, conversational interview, these questions will served as scaffolding for more probing questions. However, all questions remained within the subject of the basic questions and probing questions reflected the interviewees’ answers to the main questions. In addition, some interviews did not take place all at once, but could were broken into separate sessions. Questions that are different from round one are italicized.

Background
   (1) Tell me a little bit about your background – Describe where you are coming from geographically as well as where you are in life.
   (2) What do you do for a living and how did you fill your days before beginning your hike?
   (3) What type of environment did you grow up in (urban, rural, suburban)? As a child, did you spend a significant amount of your time indoors or outdoors?

Significant Life Experiences, Formative Influences, and Reasoning for Hiking the AT
   (1) Why are you thru-hiking the Appalachian Trail? Have you ever done it before?
   (2) What prior nature / outdoor experiences have you had?
   (3) Can you identify any experiences that led you to want to undertake this hike?
   (4) Are there any past influences in your life (such as people, places, books, media) that you credit for causing you to undertake this hike?
   (5) What would you say is the most significant previous experience or past influence that has made you decide to hike the AT?
   (6) Would you consider yourself to be environmental? How would you define “environmentalism”? Do you think you exhibit any environmentally responsible behaviors? Can you think of any examples?
   (7) Are there any previous experiences that you have had in life that made you this way?
   (8) Are there any past influences in your life (such as people, places, books, media) that you credit for making you this way?

Expectations, Experiences & Learning
   (1) What were you thinking that hiking would be like before you started planning? What were your expectations?
   (2) How did you plan and prepare for this hike?
   (3) What did you think hiking would be like after you planned and prepared for your hike?
Now that you have started your hike, do you feel that it is different than you expected? How so? Do you have different expectations for the rest of your hike? What are you expecting?

What interesting experiences have you had on your hike so far?

Have you had any interesting experiences with / of nature so far? What kind of experiences have you had in encountering the different environments and habitats of the AT?

Have you had any contact with different plants or animals? What was that like?

Now that you have hiked about half the trail, how has your experience of hiking changed over time?

What would you say has been the most significant experience you have had on the AT so far?

If you could describe your AT experience in one or two words what would it/they be?

Do you think you have learned anything so far from your planning or hiking?

How is learning on the trail different from more formal learning environments?

Do you think you have learned anything about nature? What are some examples and how did you learn about these things?

Do you think you have learned anything scientific? What are some examples and how did you learn about these things?

Do you think you have learned anything environmental or about being environmental from hiking? What are some examples and how did you learn about these things?

How would you define the term “nature”? What does the word mean to you?

Are the words “nature” and “outdoors” different? What is different or similar about them?

Can you give me some examples of nature and / or the outdoors?

Has your definition / concept of nature changed since you began your hike?

Is a vacant lot or an old corn field different from Yellowstone National park? How so?

What kind of environment is the Appalachian Trail to you?

How do you see yourself in relation to plants and animals? Is it a different relationship from the ones you have in everyday life or when you are indoors?

How do you see yourself in relation to the physical environment such as rocks, water, or air?

How do you see the relationship between living things, such as plants and animals, and the physical environment, such as rocks, water, and air?

Some people feel like that have an innate or instinctual desire to relate to or experience the natural world while others don’t feel so strongly about that. What do you think? Why do you feel this way?

How do you interact with aspects of the natural world that you find displeasing?

Do you see yourself as a part of nature or separate from nature?

Do you notice nature around you even when you are in an urban environment?
(5) Do you think your identity influences how you experience the hike? How so? Can you think of an example?
(6) What is the Appalachian Trail? How would you define it as a space or place different from or similar to other spaces or places?
(7) How would you define the terms “space” and “place” in terms of one another and how would you categorize the AT in relation to those definitions?
(8) Did you feel a connection to the AT before you began your hike? Has this changed since you have been hiking?
(9) Would you be upset or troubled if something were to damage the AT? Do you think you would ever be interested in helping to conserve the AT and its habitats? How might you want to do this?
(10) Do you think you have any power over what happens on or to the AT? Who does have power? Does nature or the AT have any power of its own?
(11) What kind of interactions have you had with other hikers so far?

Thank you very much. May I contact you when you are finished hiking in order to follow up with the second interview?

First Interview – Round Three – Interviewing Appalachian Trail thru-hikers at the end of their hike near the end of the trail near Monson, Maine. As this was an open-ended, semi-structured, conversational interview, these questions will serve as scaffolding for more probing questions. However, all questions remained within the subject of the basic questions and probing questions reflected the interviewees’ answers to the main questions. In addition, some interviews did not take place all at once, but could were broken into separate sessions. Questions that are different from round one and two are italicized.

Background
(1) Tell me a little bit about your background – Describe where you are coming from geographically as well as where you are in life.
(2) What do you do for a living and how did you fill your days before beginning your hike?
(3) What type of environment did you grow up in (urban, rural, suburban)? As a child, did you spend a significant amount of your time indoors or outdoors?

Significant Life Experiences, Formative Influences, and Reasoning for Hiking the AT
(1) Why are you thru-hiking the Appalachian Trail?
(2) What prior nature / outdoor experiences have you had?
(3) Can you identify any experiences that led you to want to undertake this hike?
(4) Are there any past influences in your life (such as people, places, books, media) that you credit for causing you to undertake this hike?
(5) What would you say is the most significant previous experience or past influence that has made you decide to hike the AT?
(6) Would you consider yourself to be environmental? How would you define “environmentalism”? Do you think you exhibit any environmentally responsible behaviors? Can you think of any examples?
(7) Are there any previous experiences that you have had in life that made you this way?
(8) Are there any past influences in your life (such as people, places, books, media) that you credit for making you this way?

Expectations, Experiences & Learning

1. What were you thinking that hiking would be like before you started planning? What were your expectations?
2. How did you plan and prepare for this hike?
3. What did you think hiking would be like after you planned and prepared for your hike?
4. Do you feel that it is different than you expected? How so?
5. What do you anticipate finishing the hike will be like?
6. What interesting experiences have you had on your hike so far?
7. Have you had any interesting experiences with / of nature so far? What kind of experiences have you had in encountering the different environments and habitats of the AT?
8. Have you had any contact with different plants or animals? What was that like?
9. Now that you are almost finished with your hike, how has your experience of hiking changed over time?
10. What would you say has been the most significant experience you have had on the AT so far?
11. If you could describe your AT experience in one or two words what would it/they be?
12. Do you think you have learned anything so far from your planning or hiking?
13. How is learning on the trail different from more formal learning environments?
14. Do you think you have learned anything about nature? What are some examples and how did you learn about these things?
15. Do you think you have learned anything scientific? What are some examples and how did you learn about these things?
16. Do you think you have learned anything environmental or about being environmental from hiking? What are some examples and how did you learn about these things?
17. What will you take away with you from this experience?

Connections to & Conceptions of Nature

1. How would you define the term “nature”? What does the word mean to you?
2. Are the words “nature” and “outdoors” different? What is different or similar about them?
3. Can you give me some examples of nature and / or the outdoors?
4. Has your definition / concept of nature changed since before you began your hike?
5. Is a vacant lot or an old corn field different from Yellowstone National park? How so?
6. What kind of environment is the Appalachian Trail to you?
7. How do you see yourself in relation to plants and animals?
8. How do you see yourself in relation to the physical environment such as rocks, water, or air?
9. How do you see the relationship between living things, such as plants and animals, and the physical environment, such as rocks, water, and air?
10. Do you think that you have an innate desire to relate to the natural world? How so?
11. How do you interact with aspects of the natural world that you find displeasing?
12. Do you see yourself as a part of nature or separate from nature?
13. Do you notice nature around you even when you are in an urban environment?

Space, Place, & Identity

1. How would you identify yourself as a thru-hiker on the AT?
2. How do you identify yourself in terms of nature and the outdoors?
(3) Has preparing for this hike or hiking the trail changed the way you see yourself?
(4) While you are hiking, do you see yourself as being in nature, being a part of nature, or no different than when you are indoors or living your day to day life?
(5) Do you think your identity influences how you experience the hike? How so? Can you think of an example?
(6) What is the Appalachian Trail? How would you define it as a space or place different from or similar to other spaces or places?
(7) How would you define the terms “space” and “place” in terms of one another and how would you categorize the AT in relation to those definitions?
(8) Did you feel a connection to the AT before you began your hike? Has this changed since you have been hiking?
(9) Would you be upset or troubled if something were to damage the AT? Do you think you would ever be interested in helping to conserve the AT and its habitats? How might you want to do this?
(10) Do you think you have any power over what happens on or to the AT? Who does have power? Does nature or the AT have any power of its own?
(11) What kind of interactions have you had with other hikers so far?

Thank you very much. May I contact you when you are finished hiking in order to follow up with the second interview?
APPENDIX C

INFORMED CONSENT TO PARTICIPATE IN A RESEARCH STUDY
Appendix C

Informed Consent to Participate in a Research Study

Study Title: The Nature of Nature: Hikers’ Experiences of Nature and the Outdoors on the Appalachian Trail.

Principal Investigator: Vanessa A. Klein

You are being invited to participate in a research study. This consent form will provide you with information on the research project, what you will need to do, and the associated risks and benefits of the research. Your participation is voluntary. Please read this form carefully. It is important that you ask questions and fully understand the research in order to make an informed decision. You will receive a copy of this document either in a hard copy or an electronic copy.

Purpose: This research project will investigate hikers’ experiences of nature while thru-hiking the Appalachian Trail, their reasons for undertaking such an endeavor, and how they connect with nature and the outdoors. All participants will receive a written copy of the results of the study.

Procedures
If you choose to participate in this project, I would like to observe your hiking experiences as well as interview you about:

1. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning takes place and how does it occur?
2. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?
   a. How do the relationships between space, place, and identity reveal themselves in terms of significant life experiences, formative influences, and reasoning?
3. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
   b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature?

If you choose to participate, the period of observation will not exceed two weeks. There will be two rounds of interviews with the first interview taking place on the Appalachian Trail and the second taking place by phone after your hike has ended. Each of the interviews will take no more than two hours.

There will be no additional tasks to perform if you choose to participate and participation may be discontinued at any time.
Audio Recording
The interviews will be audio recorded so that I may transcribe it for further review. You may have a copy of the recording and/or transcript if you wish. Upon completion of this study, the audio recordings will be destroyed.

Benefits
This research will not benefit you directly. However, your participation in this study will help us to better understand why pre-service teachers in different science content areas choose to include or exclude environmental education in their teaching practice. It will also potentially allow for improvement of science teacher education programs.

Risks and Discomforts
There are no anticipated risks beyond those encountered in everyday life.

Privacy and Confidentiality
Your study related information will be kept confidential within the limits of the law. Any identifying information will be kept in a secure location and only the researcher will have access to the data. Research participants will not be identified in any publication or presentation of research results; your confidentiality will be protected through the use of pseudonyms in all written products of the research. Written data will not be made available to anyone. Audio recordings will not be made available to anyone. Once they are transcribed, the recordings will remain secure, locked in Vanessa Klein’s office at Kent State University in Kent, Ohio.

Voluntary Participation
Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You will be informed of any new, relevant information that may affect your health, welfare, or willingness to continue your study participation.

Contact Information
If you have any questions or concerns about this research, you may contact Vanessa A. Klein at 330.672.2580. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at 330.672.2704.

Consent Statement and Signature
I have read this consent form and have had the opportunity to have my questions answered to my satisfaction. I voluntarily agree to participate in this study. I understand that a copy of this consent will be provided to me for future reference.

Participant Signature ________________________________ Date ________________________________
<table>
<thead>
<tr>
<th><strong>Some Information About You</strong></th>
<th><strong>Contact Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(<em>you may choose to abstain from answering any of the following questions)</em></td>
<td>(<em>please provide any or all of the following so that I may contact you for the final interview)</em></td>
</tr>
<tr>
<td>Initials: First ___ Last ___</td>
<td>Name: ____________________</td>
</tr>
<tr>
<td>Date of Birth <em><strong>/</strong></em>/___</td>
<td>Phone #: ___________________</td>
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<tr>
<td>Circle one: Male  Female  Other</td>
<td>Email: _____________________</td>
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<tr>
<td>Ethnicity: ___________________</td>
<td>Address: ____________________</td>
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<tr>
<td>Trail Name: __________________</td>
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APPENDIX D

AUDIOTAPE CONSENT FORM
Appendix D

Audiotape Consent Form

The Nature of Nature: Hikers’ Experiences of Nature and the Outdoors on the Appalachian Trail
Vanessa A. Klein

I agree to participate in an audio-taped interview about the inclusion of environmental education in my teaching practice as part of this project and for the purposes of data analysis. I agree that Vanessa A. Klein may audio-tape this interview. The date, time and place of the interview will be mutually agreed upon.

________________________________________________________________________

Signature                                       Date

I have been told that I have the right to listen to the recording of the interview before it is used. I have decided that I:

_____want to listen to the recording         _____do not want to listen to the recording

Sign now below if you do not want to listen to the recording. If you want to listen to the recording, you will be asked to sign after listening to them.

Vanessa A. Klein may / may not (circle one) use the audio-tapes made of me. The original tapes or copies may be used for:

_____this research project _____publication _____presentation at professional meetings

________________________________________________________________________

Signature                                       Date

Address:
APPENDIX E

PEER REVIEW GROUP INSTRUCTIONS
Appendix E

Peer Review Group Instructions

The purpose of this group is to increase the validity and trustworthiness of my data analysis for my dissertation. Peer debriefing will occur at a dissertation study group which will consist of one faculty advisor and at least one other doctoral candidate who will meet twice and attempt to confirm or challenge themes.

Directions:
1. Read your assigned transcript.
2. Make notes or memos on themes and/or possible codes, or you can just highlight or jot down interesting things that you see while reading.
   a. Look for things that are relevant to the research questions or purpose of the study (see below)
   b. You can do this directly on the transcript or you can type it onto a word document, however you usually code data is fine!
3. We will meet as a group sometime during the week of 9/8 – 9/12 (if possible) to discuss your analysis.
   a. This meeting can be in person, over google hangout, whatever works!
4. I will give another copy of the transcript that you already read, but this one will have my coding notes on it.
5. Skim the transcript again to see if you can confirm or challenge any of my coding notes.
   a. For example, I might have a code or theme that you do not see in the data and this is where you would point out that I might be extrapolating something that is not really there. Or I could be misinterpreting what the participant is saying.
6. We will meet as a group the week of 9/22 – 10/3 to confirm and challenge codes/themes.
   a. I would love to do this meeting over some food so that I can treat you all to dinner/lunch/brunch/breakfast for being so willing to be my peer debriefers on my dissertation!

Research questions, purpose, and definitions:
The overarching goal of this study is to gain a deeper understanding of hikers’ lived experience during a prolonged nature experience. The specific purposes of this study are to (1) examine the constructions of one’s nature experiences; (2) examine how these experiences in nature impact the actor’s place-making and in turn are impacted by place; (3) examine why someone would choose to engage in an intense nature experience (in connection with significant life experiences); (4) examine how a person connects to nature and what their construction of nature is; and (5) examine how knowledge is
generated during an informal nature experience. The following specific research questions will be explored:

4. In terms of hikers’ lived experiences of nature and the outdoors while thru-hiking the Appalachian Trail, how are space, place, identity and power related to one another and how do these connect to experience?
   a. What experiences do hikers have during a thru-hike of the AT?
   b. What experiential learning, if any, takes place and how does it occur?
5. What significant life experiences, formative influences, and reasoning led participants to undertake an intense nature experience?
   a. How do the relationships between space, place, and identity reveal themselves in terms of significant life experiences, formative influences, and reasoning?
6. How do people connect to nature or the outdoors during an intense nature experience?
   a. What are participants’ conceptions of nature?
   b. How do hikers’ conceptions of the relationships between space, place, and identity evolve through a long-term engagement with nature, if at all?

In keeping with the open, emergent qualities of qualitative research, operational definitions will not be used. Carspecken (1996) argues that an operational definition takes a subjective term, and turns it into an objective measurement. In order to support subjective-referenced research claims, face-to-face interviewing using sound interviewing techniques, along with prolonged observation in the field will be used. However, some explanation of terms is appropriate for clarity and intellectual transparency. The term experience, as used in the research questions, is used as a generic term which encompasses a diverse range of personal meanings, connotations, and significances such as dispositions, emotions, sensations, feelings, activities, actions, and events. Branching out from the generic term of experience, experiential learning refers to the process of making meaning from direct experience (Dewey, 1938, 1998). Significant life experiences refers to any experience, as defined above, which occurred previous to the present time and which the participant considers noteworthy, important, or momentous (Chawla, 1998). Formative influences encompass any person, place, or thing to which the participants credit their motivation, encouragement, or inspiration for behaviors, actions, choices, or characteristics of self (Chawla, 1998). Reasoning refers to reasons, motives, drives, or purposes which the participants cite for behaviors, actions, choices, or characteristics of self. The phrase intense nature experience is my own way of conceptualizing the experience of thru-hiking the Appalachian Trail. This definition reflects a personal assumption that the process and experience of thru-hiking the Appalachian Trail constitutes an experience which is powerful and extreme in nature due to the ruggedness, remoteness, and hardships of a long distance hike in a wilderness area. Space, place, identity, and power are tenets of critical geography (Soja, 1989), which will be used as the theoretical lens in this study. A place will be defined as an area or location
to which a participant has some sort of attachment, connection, or associated meaning (Katz, 1997). A space is defined as an area or location to which the participant has ascribed no meaning or connection (Katz, 1997). Identity is a term referring to one’s self, character, or personality and is unique and distinctive to each individual (Helfenbein, 2010). Power refers to control, influence, or impact between individuals, groups, places, organisms, or environments (Foucoul, 1980). Space, place, identity, and power will be discussed further in the theoretical framework. The term connect refers to a connection, attachment, bond, union, or interrelationship that a participant may have with any aspect of nature or the outdoors. Conception denotes an idea, notion, definition, meaning, description, classification, explanation, or characterization which a participant ascribes to a place or entity; in this case, nature. This terminology has been discussed in terms of my personal assumptions and the inherently constructed nature of words and their meanings. Due to the emergent and open nature of qualitative research and the unknowns of interaction with participants, data collection, and data analysis, it may be necessary to revisit this terminology to ensure that it reflects participant meanings.
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