

**The Value of Ecological Restoration Volunteer Programs:  
A Case Study in Western Washington State**

by

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A Thesis Submitted in partial fulfillment  
of the requirements for the degree  
Master of Environmental Study  
The Evergreen State College  
March 2009

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## **Abstract**

### **The Value of Ecological Restoration Volunteer Programs: A Case Study in Western Washington State**

Catherine Langenfeld

Localized, grassroots participation in ecological restoration has powerful social and environmental implications. Successful volunteer programs enable participants to connect with their local natural environments. Such connection creates feelings of ownership, dedication, and motivation to restore and protect the land. Localized citizen advocacy is significant for professional environmental organizations and government agencies because participants' efforts aid in an organization's ability to achieve its conservation goals. Ecological restoration and maintenance is an environmental initiative that often requires long-term dedication and commitment by numerous individuals. Investment in volunteer programs is an effective method that land managers can use to foster long-term community stewardship, while accomplishing their restoration goals.

This thesis is focused upon the restoration efforts of the South Sound Prairie Volunteer Group, a group of local advocates who conduct prairie restoration work on public lands in western Washington, under the management of the professional environmental organization, The Nature Conservancy (TNC). Through a case study of a grassroots volunteer movement, I explore how volunteer advocates have advanced local ecological restoration efforts. I examine the experiences, values, and motivations that have led to long-term volunteer dedication. In turn, I seek to illustrate the vast amount of work that dedicated citizen stewards accomplish for restoration-focused environmental initiatives. Moreover, I contend that lessons derived from this single case study can provide beneficial guidance to other ecological restoration efforts.

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## Acknowledgements

Throughout the process of writing this thesis, I was blessed with the support and guidance of many individuals. First of all, I would like to thank my advisor, Dr. Edward (Ted) Whitesell, for his patience, wisdom and kindness throughout the entire writing process. Your detailed revisions made this paper strong. I also send my gratitude to the other members of my thesis committee, Dr. Karen Gaul and Patrick Dunn, for their guidance and revisions.

A special thank you must be extended to Carrie Marschner of The Nature Conservancy. This project would not have been possible without her support and enthusiasm. Numerous other members of TNC staff offered their ideas and research assistance and for that I am grateful.

It is with the deepest gratitude and warmest heart, that I thank the South Sound prairie volunteers for sharing their stories, opinions, and knowledge of the prairies. Their honesty, passion, and sense of humor are what gave this paper a real voice. You truly are an inspiration.

Finally, to my family and close friends; thank you for your support through out the entire process. I could not have done it without you!

## **Chapter 1 – Long-Term Volunteer Dedication**

*Well, I feel pretty strongly that everybody should try to give something back to society, to the world, the planet and try to make it a little better, both ecologically and for the human beings that are here and I think it is really important to try to maintain some of the wild areas and some of the natural areas. I think that is extremely important. The world is so battered and beat up, there are few places that are left that we can actually help protect and preserve and maybe restore. I just think it is something I feel a moral obligation to do and it's fun and it's – it just makes me feel better. It's really a – it's really a high for me.*

James L. Boone<sup>1</sup>

Glacial Heritage Preserve volunteer for 9 years

Management of public lands and natural resources has changed considerably over the last several years. One such change is the growing assistance of professional environmental organizations in the co-management of public lands. At the same time, there has been a growing social perception that communities hold an integral role in the management of local natural areas (Schroeder 2000, Ryan et al. 2001, Donald 1997, Westphal 1993). This shift of public value has appeared at a time when public agencies and non-governmental organizations (NGOs) are faced with shrinking budgets and staff reductions as well as growing environmental concerns. The combination of these factors has led to a substantial increase in the reliance on volunteer programs to accomplish environmental initiatives on public and private lands. This is especially evident in the field of ecological restoration.

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<sup>1</sup> All quotes from volunteers are taken from thesis interview transcripts unless otherwise noted.



Localized grassroots efforts in ecological restoration initiatives have powerful social and environmental implications. Successful volunteer programs enable participants to connect with their local natural environment. Such connection creates feelings of ownership, dedication, and motivation to restore and protect the land. Localized citizen advocacy is significant for professional environmental organizations and government agencies because participants' efforts aid in an organization's ability to achieve its conservation goals.

Ecological restoration and maintenance is an environmental initiative that often requires long-term dedication and commitment by numerous individuals. Solely relying on paid positions could be both costly for government agencies and NGOs and could create an unrealistic workload for professionals in the environmental field. Investment in volunteer programs is an effective method land managers can use to foster long-term community stewardship, while accomplishing their restoration goals. Therefore, it is significant to examine why certain individuals choose to dedicate their time and efforts to restore their local natural environment. Examination of ecological restoration volunteers, as a unique population, allows the researcher to get to the heart of what drives volunteers in this field.

This thesis is focused upon the restoration efforts of the South Sound Prairie Volunteer Group, a group of local advocates who conduct prairie restoration work on public lands in western Washington, under the management of a professional environmental organization, The Nature Conservancy (TNC). The Glacial Heritage Preserve, owned by Thurston County and managed by TNC, is the region of focus. Through a case study of a grassroots volunteer movement,

I explore how volunteer advocates have advanced local ecological restoration efforts. I examine the experiences, values, and motivations that have led to long-term volunteer dedication. In turn, I seek to illustrate the vast amount of work dedicated citizen stewards accomplish for restoration-focused environmental initiatives. Moreover, I contend that lessons derived from this single case study can provide beneficial guidance to other ecological restoration efforts.

Careful analysis of this case study illustrates that the accomplishments achieved by a successful volunteer program do not end with on-the-ground restoration. Participation in local conservation efforts inspires dedication, ownership, and empowerment. Moreover, through this thesis I suggest that a successful volunteer program creates feelings within the volunteers that lead to a greater connection to nature and to the community of people that works to conserve the land. This connection, in turn, can lead to the social embrace of a land ethic, which promotes conservation, preservation, and restoration. The spread of such cultural values can further enable government agencies and NGOs to achieve their conservation goals, leading to greater protection of fragile ecosystems. Ultimately, organizations such as TNC are then able to fully realize their conservation goals in ways that could not be achieved without volunteer dedication and community support.

In 2008, TNC released the Glacial Heritage Preserve Restoration Work Plan (TNCWA 2008a). Volunteer participation in ecological restoration activities is an integral part of the work plan. The Nature Conservancy work plan states, “The Preserve will . . . serve as a focal site for public participation in prairie

restoration activities” (TNCWA 2008a, 3). The focus of TNC, combined with the historic, long-term dedication of South Sound prairie volunteers, make this group a prime population from which valuable lessons can be drawn. Additionally, the 2008 strategic goals of TNC directly coincide with the present analysis of the South Sound Prairie Volunteer Group’s motivations, values and experiences. Positive integration of both the organization’s vision as well as the volunteers’ goals expands the possibility of local restoration success, and volunteer satisfaction, while furthering TNC’s ability to achieve its regional conservation goals and to further its mission.

Between January and June, 2008, I volunteered on a weekly basis with the South Sound Prairie Volunteer Group. This enabled me to work alongside numerous volunteers and TNC employees. Therefore, although TNC works toward global conservation, my direct experience and all interactions are based within western Washington. My research was conducted as an elaborated case study and is meant to add to the literature on ecological restoration volunteer work. Namely, my research addresses how professionals in the environmental field can strengthen their ecological restoration programs through an increased understanding of volunteer motivations, values, and experiences. This understanding can in turn give professionals insight into fostering long-term volunteer dedication and ultimately increased restoration efforts.

Current literature upholds the assertion that there is growing social support for the volunteer ecological restoration movement (Schroeder 2000, Bowcutt 1999). This social support has transformed into the development of numerous

volunteer programs. For example, in Toronto volunteers are involved in watershed restoration initiatives on the Don River (Donald 1997). In Illinois, local communities have formed the Volunteer Stewardship Network to address prairie and savanna restoration concerns (Schroeder 2000). Similar restoration efforts have been documented throughout the Pacific Northwest (Bowcutt 1999, Hastings 2006, Aull 2007).

Several dominant themes have repeatedly emerged in the current literature focused on ecological restoration volunteer programs. To begin with, recent studies have suggested that social perceptions of an environmental issue influence the level of local citizen involvement (Schroeder 2000, Middleton 2001, Donald 1997). Furthermore, numerous researchers have contended that ecological restoration programs could benefit from an increased understanding of volunteer motivations, values and experiences (Schroeder 2000, Grese et al. 2000, Westphal 1993). Educating citizens about local restoration concerns and then empowering them to address these issues reinforces positive feedback cycles and ultimately leads to increased conservation. Likewise, attachment to local natural areas increases the participants' desire to become caretakers of that place (Ryan 2000, Ryan et al. 2001, Forbs 2008).

Within the context of this thesis, professional environmental organizations are defined as mainstream NGOs that address environmental concerns at national or international levels while attempting to fulfill their overriding organizational missions. Localized grassroots advocacy groups are defined as organizations that concentrate on issues that affect local communities and environments. Grassroots

advocacy groups rarely operate with the staff, budget, or agenda of professional environmental organizations. However, professional environmental organizations often strategically or financially support localized grassroots advocacy efforts. When this occurs, localized environmental efforts become part of a larger environmental movement. As stated, this thesis is focused on the efforts of a localized grassroots volunteer group whose participants conduct ecological restoration work under the direction of a professional environmental organization.

Volunteers are defined as “persons who did unpaid work (except for expenses) through or for an organization” (Bureau of Labor Statistics 2007). Ecological restoration is defined as “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed (SERI 2004).”

The term “movement” is used to describe collective organization around a common interest that seeks to bring about a desired change or outcome (Dryzek et al. 2003). In the context of this paper, the collective organization is the localized grassroots volunteer group, the interest is ecological restoration, and the desired outcome of the advocates is improved environmental conditions. A major purpose of this case study is to illustrate how localized ecological restoration volunteer efforts aid in the collective formation of an environmental movement.

### **Chapter Organization:**

Chapter two will provide a literature review of the chief studies that have been conducted on ecological restoration volunteerism. This chapter examines the dominant research methods employed and the prevalent conclusions reached by ecological restoration scholars. Discussion of this topic is divided into five

themes: understanding volunteer dedication, positive reinforcement associated with being part of proactive change, personal benefits associated with volunteering, attachment to place, and overcoming limitations associated with volunteer programs. This chapter concludes with a collective analysis of lessons that can be derived from past studies and a brief explanation of how current research relates to my analysis of the South Sound Prairie Volunteer Group.

Chapter three provides a general history of the Glacial Heritage Preserve, the South Sound Prairie Volunteer Group and The Nature Conservancy. The ecological significance of South Sound prairies and historical anthropogenic influences are presented. This chapter is meant to give the reader a vivid picture of the unfolding relationship between localized grassroots volunteer efforts and management of prairie landscapes. In addition, this chapter introduces the environmental concerns South Sound prairie volunteers are faced with. Finally, this chapter portrays how volunteer efforts directly tie into TNC ecological restoration management.

Chapter four portrays the findings of this research. This chapter begins with a description of the research design, methods of validity, and justification for the choice of an elaborated case study. Next, the strengths and shortcomings associated with interpretive qualitative research are discussed. The majority of this chapter is devoted to analysis of the data derived from volunteer interviews. Three themes and ten sub-themes, examining what leads to long-term volunteer dedication, are shared. Selected quotes and passages are provided to directly highlight the voice of the participants. This chapter concludes with suggestions

for how these research findings can be incorporated into other ecological restoration efforts.

Finally, chapter five consists of a discussion of the previous chapters. This chapter presents a unified elaboration of the major concepts of this thesis. A review of my research results and analysis of how past studies relate to this research is included. This chapter concludes with a final discussion of the social and ecological implications of ecological restoration volunteerism.

## **Chapter 2 – Literature Review: A Look at Past Studies**

*It couldn't exist without the volunteers.*

Don Guyot  
Glacial Heritage Preserve volunteer for 2 years

This chapter presents a widespread review of the peer-reviewed literature that is focused upon ecological restoration volunteer programs. The purpose of this literature review is to examine the chief studies focused on volunteer participation experiences in restoration efforts. Past reviews of this topic have suggested that expanded analysis of ecological restoration volunteerism could be beneficial for environmental volunteer programs (Broun 2007, Ryan et al. 2001, Miles et al. 2000, Hastings 2006). Increased understanding of volunteer experiences enables land managers to foster opportunities that allow participants to know and value their local, natural environments. Participants are then much more likely to become long-term volunteers.

This chapter will begin with a review of the dominant research methods that have been employed by ecological restoration scholars. The diverse background of the researchers in this field will be touched upon and their calls for additional research on this topic will be voiced. Next, I will explore the dominant themes that have emerged throughout the majority of this literature. Past research has suggested that volunteer satisfaction holds a unique and key role in the successful establishment of long-term restoration initiatives. Therefore, understanding of volunteer experiences could prove to be beneficial for land



managers and program directors. Finally, this chapter will conclude with a discussion of the lessons that can be derived from current literature on this topic, and how lessons of past studies relate to this case study. The commonality of the results found in these case studies suggests that the results are not isolated and that the lessons derived from one specific region could benefit programs in another. My own research will add to this topic through the presentation and examination of a specific case study, which examines the motivations, values, and experiences of volunteers from a variety of backgrounds. The results of my analysis reflect the information presented in this literature review.

It is significant to examine the research methods employed by ecological restoration volunteerism scholars. Due to the diverse nature of this field, researchers stem from a variety of backgrounds such as geography, environmental psychology, landscape architecture, sociology, and restoration ecology. Of the literature I reviewed, the researchers analyzed volunteers in a variety of case study frameworks, employing diverse methodological approaches to examine this population. Data collection for these studies occurred through methods such as voluntary surveys, literature reviews, and interviews. Selected case studies focused on a combination of philosophical ideas and practical lessons. The case studies illustrated ways in which local advocates could assist in the restoration of their local environments. At the same time, the researchers examined methods that managers can use to strengthen their volunteer programs.

## **Dominant Themes**

Analysis of the current literature on ecological restoration volunteer programs suggests that there are several dominant themes that have repeatedly emerged in relation to this topic. For instance, researchers frequently reinforced the idea that gaining a thorough understanding of volunteer motivations and values will enable managers to tailor their programs to coincide with volunteer needs (Schroeder 2000, Grese et al. 2000, Ryan et al. 2001). Further, how volunteers perceive an environmental issue and their ability to alleviate the problem play a direct role in positive reinforcement (Schroeder 2000, Westphal 1993). Personal benefits associated with volunteering have proven to be another dominant theme in the current literature (Grese et al. 2000, Schroeder 2000, Hastings 2006, Westphal 1993). Volunteers value social interactions, educational and training opportunities, spiritual development and the opportunity to experience the outdoors. Attachment to local natural environments fosters greater concern over local environmental issues and increases the probability that an individual will seek out experiences in such places (Ryan 2000, Ryan et al. 2001). Finally, acknowledging the possible limitations associated with volunteer programs enables land managers to address volunteer-related concerns that both volunteers and land managers may have (Geist et al. 1999). The following section will expand upon these themes through discussion of several key studies that have added to the knowledge of this topic.

## Understanding Volunteer Dedication

A common focus of ecological restoration volunteer research is to gain an understanding into why certain volunteers become so dedicated to ecological restoration work and how environmental programs can benefit from these lessons. In an examination of volunteer newsletters of nine restoration groups associated with the Illinois chapter of The Nature Conservancy, Schroeder (2000) concludes that three interacting factors lead to long-term dedication. First, participants have feelings of great urgency in reaction to the loss of biodiversity and native ecosystems. Second, they believe that they can make a worthwhile difference. Finally, dedicated volunteers are able to see the positive difference their efforts are making. Schroeder stresses that, when combined, these three factors can produce both incentive and positive reinforcement to local advocates. Although the results of this particular study only represent the views of the individuals who contributed to the volunteer newsletters, similar results have been obtained by recent studies using other research methods (Grese et al., Ryan 2000, Miles 2000).

Schroeder's research has been central to the field of ecological restoration volunteer research, as he was one of the pioneering researchers to examine environmental restoration volunteers as a specific population. As research on this topic has expanded, Schroeder's results have been cited and supported by numerous other researchers in this field using a variety of research methods (Grese et al. 2000, Ryan et al. 2001, and Hastings 2006, Miles et al. 2000).

For example, Grese et al. (2000) gathered data directly from volunteers through a combination of participant interviews and a volunteer survey. The

authors first interviewed four Chicago area participants and leaders of several volunteer programs in Michigan. From these interviews they created a survey that was distributed to participants of five different volunteer programs in Ohio and Michigan. Volunteers were contacted in person and through the mail. A total of 190 individuals participated in the survey. Volunteers were asked to rate their reasons for participating and the benefits they received from involvement. The authors then developed a set of four relevant themes to help explain how and why long-term volunteer dedication develops. These were as follows: helping the environment (people are given the chance to take action and make a difference), exploration (people are able to explore new activities and places), reflection and restoration (the spiritual benefits), and personal and social benefits (the bond individuals form with other volunteers) (Grese et al. 2000). The authors maintain that emphasis of these themes by volunteer coordinators and natural preserve managers could positively affect community awareness and support. These same four themes closely conform to the overriding conclusion of this thesis i.e., that volunteers gain personal benefits through the act of volunteering, while also positively affecting social and environmental concerns.

### Positive Reinforcement

This literature consistently demonstrates that an individual's desire to volunteer on a long-term basis is tied to the ability to address environmental concerns. This concept is one of the main conclusions stressed by Schroeder (2000). Participant motivation and dedication is tied to concern over

environmental issues, combined with a belief in the ability to see tangible environmental change as a result of their efforts.

Geist et al. (1999) state that ecological restoration goals are most likely to be met when local citizen contribution is the greatest. Through the creation of a “reciprocal model of restoration,” the authors examined the development of a beneficial relationship between restoration advocates and the natural environment (Geist et al. 1999, 970). The theoretical model was based on the conclusions of past research on volunteerism in environmental programs. Geist et al. contend that commitment to restoration initiatives increases when citizen advocates are able to develop close relationships with their natural environments. Human benefits increase when advocates successfully restore ecological functions. The authors conclude their analysis with recommendations for maintaining strong volunteer efforts. Suggestions include advanced training for volunteers in ecological monitoring and group decision-making, increased leadership opportunities, fostering of group cohesiveness, and matching human contributions with social needs. These suggestions coincide with the dominant themes of the discussed literature. Volunteer programs that strive to meet the needs of their participants are more apt to achieve long-term restoration success.

### Personal Benefits Associated with Volunteering

Personal benefits associated with volunteering represent another dominant theme in ecological restoration volunteer research. Along with the ability to address environmental concerns, dedicated volunteers value education, skill

development, socialization, spiritual benefits, program organization and the opportunity to advance within their volunteer work.

A survey conducted by Donald (1997) supports these conclusions. Donald conducted a survey of 108 participants to examine the motivational characteristics of volunteers at different levels of involvement in a watershed restoration initiative on the Don River near Toronto, Canada. Donald found that active volunteers value educational and skill developmental opportunities, as well as social interactions associated with volunteering.

Miles et al. (2000) conducted a mail survey of 306 volunteer restorationists in the Chicago area. The purpose of the study was to measure the type and level of satisfaction volunteers gained through restoration activities. The sample consisted of site stewards and randomly selected volunteers from four environmental organizations. The authors conclude that the volunteers were motivated by a variety of personal benefits such as personal growth, socialization, participation in physical activity, the opportunity to experience nature and the chance to be a part of meaningful action. These ideas coincide with the conclusions of Donald (1997). Donald concludes that ecological restoration volunteers are more likely to have knowledge of local ecological problems and that a combination of values and experiences influence the level of activity taken on by volunteers. Thus, from Donald's conclusions one can infer that volunteer experiences are overwhelmingly influenced by the environmental programs they participate in and the opportunities such management fosters.

The conclusions of Westphal (1993) coincide with current research on this topic. Through a combination of surveys, participant observation, and interviews, Westphal examined the motivations of urban forestry volunteers. Westphal identifies personal benefits as one of the main reasons individuals volunteer for ecological restoration initiatives. She states that participants are motivated to volunteer for three main reasons, which bring about positive emotional benefits: the desire to gain an improved connection with nature, the opportunity to do something tangible to help the environment, and a strong appreciation of nature. These conclusions tie into present analysis of this topic. Schroeder (2000), Grese et al. (2000) and Miles et al. (2000) emphasize the personal benefits associated with being a part of proactive change, while Donald (1997) and Ryan et al. (2001) express how land managers can foster this experience.

Of the most recent literature on volunteer motivations, Hastings (2006) conducted 18 ethnographic interviews with volunteers who participated in restoration activities coordinated by the Oregon Chapter of The Nature Conservancy. Hastings' research focused upon volunteer motivations. His results indicate that tangible and intangible personal gains, in addition to altruistic motives, play a role in volunteer commitment and motivation.

Aull (2004) conducted an Internet survey of 135 respondents that examined the experience of volunteers who participated in ecological research in Washington and Oregon. Aull's analysis concludes that ecological restoration volunteers experience positive changes in environmental outlooks and actions.

Like the authors above, Aull finds powerful social motivation for volunteering. Further, he reiterates that program effectiveness is tied to volunteer satisfaction.

### Attachment to Place

It is significant to explicitly focus upon volunteer experiences in conservation and restoration efforts, because of the unique nature of this type of work. Ryan (2000) and Ryan et al. (2001) conclude that a volunteer's environmental experience is an influential factor in a participant's attachment and attitude toward natural areas. Ryan (2000) conducted a case study in which more than 300 natural area users were surveyed about their attachment to, use of, and knowledge about three urban natural areas in Ann Arbor, Michigan. Data consisted of respondents' reactions to photographs of natural areas and their responses to written questions about their attachment to study sites. The findings reveal that frequent visitation of a natural area creates a conceptual attachment to place and that people's interest in protecting such places often stems from that attachment. Ecological restoration offers a way for natural area users to repeatedly visit and build connection with their local environment. Therefore, conservation efforts can benefit dramatically through fostering community attachment to local natural areas.

Ryan et al. (2001) surveyed 148 individuals who had volunteered with an environmental restoration program in Michigan for more than one year. This study focused explicitly on long-term restoration volunteers. The purpose of the survey was to examine the relationship between long-term volunteer commitment



and motivation. The research also examined the effect that volunteering has on an individual's behavior and attitude toward the environment. Similar to Ryan's (2000) earlier study, the results suggest that participation in volunteer restoration creates a unique conceptual attachment to local natural areas and increases the participants' desire to protect similar natural environments. From these conclusions, the authors recommend that program managers can more efficiently engage and retain long-term volunteers through actions such as providing a productive and organized work environment; nurturing volunteers' personal growth; highlighting volunteer accomplishments; and providing new educational and leadership opportunities.

A similar conclusion was recently drawn by Forbs et al. (2008). Through a survey of 185 bottomland forest restorationists in Texas, their study concludes that restoration work increases the participants' connection to the local preserve. Furthermore, volunteer planting areas were found to have a higher seedling survival rate than professionally contracted planted areas. The results lead the authors to conclude that volunteers can produce high quality restoration work and that investment in such activities could benefit similar initiatives.

Grese et al. (2000) and Hastings (2006) conclude that volunteers benefit through the opportunity to spend time in a unique local habitat. Such experiences lead to identification with the local ecology and native areas. They also provide spiritual benefits. These findings reflect those of Ryan (2000) and Ryan et al. (2001). Attachment to place is an important factor for program managers to consider and a continual theme that emerged throughout the present literature.

## Overcoming Limitations

The above literature has discussed variables that influence the successful management of ecological restoration volunteer programs. The following section will briefly examine potential limitations of volunteer programs, which could be overcome by more effective use of volunteers. Common limitations associated with ineffective volunteer programs include volunteer turnover and burnout, and the possibility of conflicting visions of restoration goals between land managers and volunteers. In many cases, on-going ecological projects are at the mercy of volunteer commitment, dedication and recruitment (Geist et al. 1999). Therefore, lack of long-term involvement could have negative effects on ecological restoration efforts.

Geist et al. (1999) state that human obstacles are the largest hurdle that restoration efforts must work to overcome. Examples of human obstacles associated with volunteer work include the sway of public values that influence policymaking and public involvement in ecological restoration projects.

Human obstacles were further explored by Byron et al. (2002), through the examination of two mailed surveys that focused on volunteer burnout or loss of engagement. They surveyed 458 randomly selected volunteers from 47 different Landcare groups from two regions of Australia. In this analysis, the authors conclude that ecological restoration goals, based on volunteer efforts, need to realistically factor in loss of public engagement, volunteer turnover, and the limitations of volunteer programs (Byron et al. 2002).

Another major dilemma in ecological restoration volunteer projects is designing initiatives to meet both ecological and social needs (Geist et al. 1999). Conflicting visions of restoration goals can lead to social conflict and inefficient volunteer programs. Miles et al. (2000) acknowledge that volunteer participation may be tempered by frustrations that occur as an individual becomes more involved in a project. Therefore, volunteer initiatives need to coincide with management plans and land use designations.

Acknowledging the limitations associated with volunteerism enables land managers and volunteers to address the problems they may encounter. Moreover, addressing these issues can lead to increased ecological restoration success and increased volunteer derived benefits associated with participating in such programs. Lastly, it is significant to note that limitations expressed in peer-reviewed literature plainly match the suggestions the authors in this chapter recommend for strengthening volunteer programs. This can lead one to conclude that the negative effects of human obstacles, such as volunteer burnout or loss of engagement, can be reduced through proactive management that promotes volunteer benefits while achieving restoration goals. Fostering volunteer satisfaction within restoration initiatives is an influential method of achieving public support for long-term restoration goals.

## **Discussion**

In conclusion, the present chapter has reviewed some of the major studies that have focused on ecological restoration volunteerism. The focus of this literature review was to examine how volunteer experiences can influence the accomplishment of restoration initiatives, while also meeting larger social and cultural objectives. This chapter was divided into five themes that were prevalent in this research: understanding volunteer dedication, positive reinforcement, personal benefits associated with volunteering, attachment to place, and overcoming limitations. These themes are complex and interrelated. Namely, enriched experiences are more likely to foster long-term volunteer dedication and ecological restoration success.

Continual research on this topic would benefit ecological restoration programs. The research to date has clearly shown that a thorough understanding of volunteer motivations, values and experiences provides valuable knowledge to land managers and conservation stewards. Thus, the mutually beneficial relationship between volunteers and improvements in the environment has proven to be a central finding in the work of numerous researchers (Ryan et al. 2001, Schroeder 2000, Grese et al. 2000, Miles et al. 2000, Forbes 2008, Westphal 1993). The limitation of volunteer efforts was also discussed (Geist et al. 1999, Byron et al. 2002). The problems associated with these limitations could be alleviated through practice of the proactive steps outlined above.

From a philosophical perspective, environmental programs could benefit from increased attunement to the fluctuation of social values, which influence

volunteer participation, support for program funding, restoration initiatives and protection of biodiversity. Future research could benefit this field through exploring how communities comprehend and view ecological issues and through addressing how conservationists can increase public awareness of their cause. On a pragmatic level, volunteer coordinators and land managers can benefit from increased recognition of the successful real-life efforts employed by other programs and the lessons they have learned; therefore, continual documentation of case studies will prove to be fruitful.

Consistent research findings, derived from a variety of disciplinary approaches, increases confidence in the above recommendations as paths to ecological and social benefits. Furthermore, although researchers employed multiple research methods such as surveys, interviews, and literature reviews, they largely arrived at complementary conclusions and shared similar recommendations for improvement of volunteer programs. The results of this thesis, presented in Chapter 4, provide further support for these conclusions.

My own research was conducted in the conventional method of an elaborated case study. Original data was gathered through the use of semi-structured interviews. Similar to past case studies, my research applied the lessons derived from a specific case to that of a larger population. The value of expanding the knowledge generated from a single case study to a larger population is supported by Ruben and Ruben (2005). My research is an example of a pragmatic case study that provides concrete suggestions for strengthening ecological restoration volunteer programs. My analysis provides philosophical

methods that focus on strengthening a socially embraced land ethic, as well as pragmatic hands-on suggestions for motivating and retaining dedicated volunteers.

### **Chapter 3 – Historic Influences on the Glacial Heritage Preserve**

The Broom Buster Song

*There's a strange plant in the neighborhood  
Its flowers are yellow, but it's no good  
In late summer it spreads its seed  
Just one pop!  
- a lot more weed  
Who ya gonna call?  
- Broom Busters!*

Stephen J. Rutkowski,  
Glacial Heritage Preserve volunteer for 5 years

The above excerpt voices a vivid example of the actions ecological restoration volunteers in western Washington have taken to restore their local natural environment. South Sound prairie volunteers dedicate time and energy to the restoration and maintenance of a local ecosystem they value and identify with. They conduct valuable restoration work, such as the removal of non-native invasive species like Scotch broom (*Cytisus scoparius*), which enables native species to revegetate and thrive. Moreover, they assist a global environmental organization in achieving significant, localized goals. Throughout the history of western Washington prairies, humans have held an influential role in both the development and degradation of the prairie biome. The restoration efforts of these volunteers contribute to the current anthropogenic actions that are influencing the present state of this dynamic landscape.

This chapter provides background into the history of South Puget Sound prairies, the Glacial Heritage Preserve, the South Sound Prairie Volunteer Group

and The Nature Conservancy. Through this chapter, I will illustrate the ecological and cultural significance of prairies in western Washington and the significant role ecological volunteers have played in restoring and maintaining these environments. Prairies are vital ecologically and culturally, which makes collaboration between professionals and volunteers so valuable.

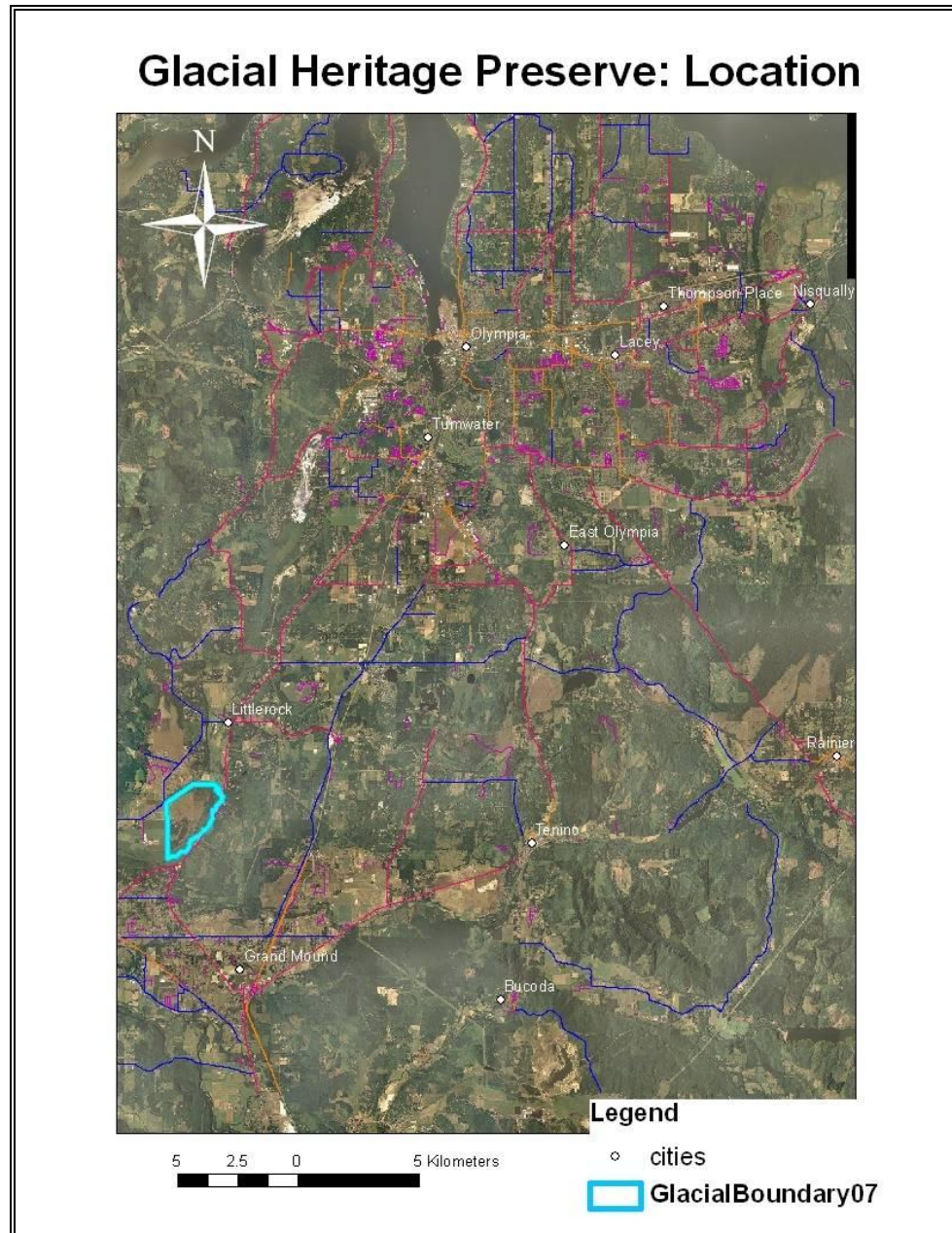
This chapter will first focus on the ecological and cultural background of the Glacial Heritage Preserve and South Puget Sound prairies. This section is provided to show the historic influence humans have had within this landscape. Next, this chapter focuses upon the restoration work accomplished by the South Sound Prairie Volunteer Group. As stated, South Sound prairie volunteers' efforts aid in TNC's ability to meet its restoration goals. By accomplishing local restoration, they are contributing to regional and national restoration objectives held by agencies such as Thurston County, Washington State and NGOs like TNC. This chapter concludes with an examination of TNC's history, organization, mission, and restoration management initiatives. It will be shown that successful restoration of the Glacial Heritage Preserve is a key component of TNC's strategic, science-based process called "Conservation by Design" (TNC 2008). Moreover, this section establishes how local ecological restoration efforts relate to national and international restoration objectives.

### **The Glacial Heritage Preserve**

The Glacial Heritage Preserve is approximately 1,100 acres in size. It is the second largest protected prairie in the Puget Sound region, representing one of



the last remaining high quality parcels of prairie ecosystem in western Washington (TNCWA 2008a). The preserve is located in southern Thurston County, southwest of the community of Littlerock (see location map, Figure 1, page 26).



**Figure 1. Glacial Heritage Preserve: Location (TNCWA 2008b)**

The majority of the preserve is under the jurisdiction of Thurston County, with the exception of an 80-acre holding under the jurisdiction of the Washington Department of Fish and Wildlife (WDFW) (TNCWA 2008a). The preserve was designated as a conservation site in 1989 and is officially managed under the umbrella of the Thurston County Parks and Recreation Department (TNCWA 2008a). TNC has helped manage the land since 1996, the year in which the South Sound Prairie Volunteer Group was born (TNCWA 2008a). TNC provides expertise and personnel that Thurston County cannot provide, and it conducts restoration actions that complement the ecological restoration work conducted by the WDFW.



**Figure 2.** Springtime at Glacial Heritage Preserve  
Shown are Garry's oaks (*Quercus garryana*) with blue camas (*Camassia quamash*) in bloom.

Photograph courtesy of Dan and Patricia Montague.

From the prairie, one receives unhindered views of the Black Hills to the west, while the eastern side of the preserve is flanked by the Black River. The existence of this unique landscape is the combined result of geologic, climatic,

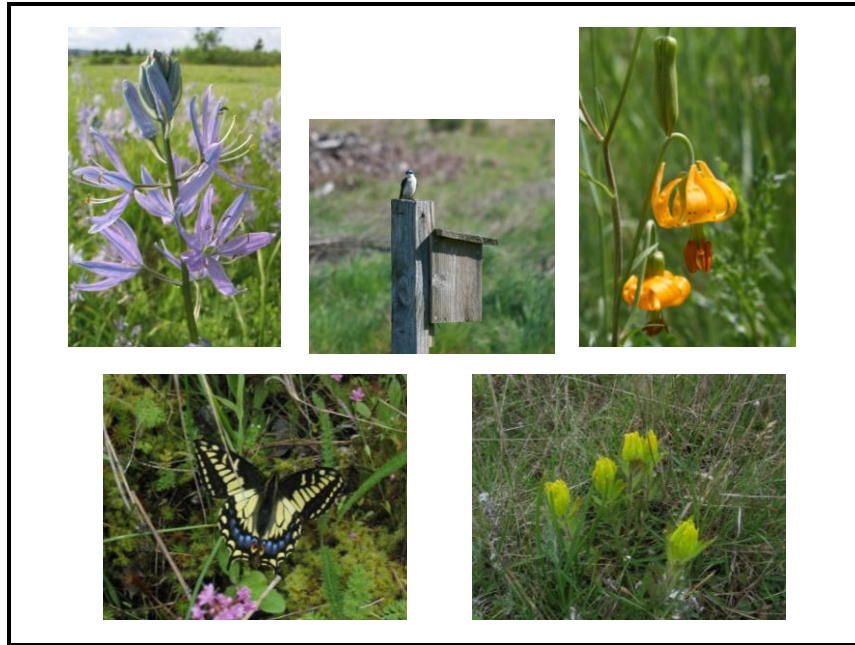
and anthropogenic influences. The area's glacial history, combined with local climate, created the subsequent soils, which were in turn affected by local communities (Ewing 1997). After glacial retreat, the region's soils may have been initially maintained by harsh conditions and natural fires and later maintained by intentional fires set by Native Americans.



**Figure 3.** Glacial Heritage Preserve in November  
Photograph courtesy of Dan and Patricia Montague.

At the time of Euro-American settlement, historic prairies in the Puget Sound region occupied roughly 150,000 acres (Sinclair et al. 2006). Today, nearly 97% of South Puget Sound prairie habitat, including the basic ecological processes that sustain these environments, have disappeared (Dunn et al. 1997). The diminishment of this northwestern landscape has occurred due to agricultural practices, urban development, fire suppression, and encroachment of invasive species (Ewing 1997). The vast destruction of high quality prairie sites has posed ecological restoration challenges for both land managers and local volunteer advocates (Sinclair et al. 2006). TNC views the Glacial Heritage Preserve as a

key component of the network of preserves that have been set aside to protect one of the rarest ecosystems in Washington State (TNCWA 2008a).



**Figures 4 – 8.** (Clockwise, from upper left) Blue Camas (*Camassia quamash*); Western Bluebird (*Sialia mexicana*); Columbia Lily (*Lilium columbianum*); Golden Paintbrush (*Castilleja levisecta*); Anise Swallowtail (*Papilio zelicaon*)  
Photographs 5 & 6 courtesy of Dan and Patricia Montague.  
Photographs 4, 7 & 8 courtesy of David Hepp.

The Glacial Heritage Preserve is considered to be a biodiversity hotspot due to the area's unique combination of grasslands, riparian woodlands, coniferous forests, and oak woodlands (TNCWA 2008a). Such a mosaic creates habitat not available in other prairie preserves. Pacific Northwest prairie landscapes are home to thirty-two prairie-associated endemic or nearly endemic plant taxa and numerous bird, insect and mammalian species as well (Sinclair et al. 2006). Present conditions threaten the continued existence of many of these species. Plant species such as golden paintbrush (*Castilleja levisecta*) and white-

top aster (*Sericocarpus rigidus*) are threatened (Wentworth 1997, Giblin 1997). Golden paintbrush is listed as threatened under the U.S. Endangered Species Act (USESA) and as endangered by the Washington Natural Heritage Program (WA DNR 2009). White-top aster is listed as sensitive by the Washington Natural Heritage Program and as a USESA species of concern (WA DNR 2009). Likewise, local birds like the Vesper Sparrow (*Pooecetes gramineus*) and Western Meadowlark (*Sturnella neglecta*), along with butterflies such as the Taylor's Checkerspot (*Euphydryas editha taylori*), Mardon Skipper (*Polites mardon*) and Puget Blue (*Plebejus icarioides blackmorei*) have dwindling populations (TNCWA 2008a, Ewing 1997). Taylor's Checkerspot and the Mardon Skipper are listed as endangered in Washington State by the USFWS (WA DNR 2009).

Presently, the area is plagued with multiple biological stresses owing to the presence of invasive species including Scotch broom, exotic grasses and forbs, and the encroachment of Douglas fir (*Pseudotsuga menziesii*) (Sinclair et al. 2006). Invasive species are defined as species that displace native species or alter the ecological processes that naturally shape an ecosystem (Polster et al. 2006).

### Anthropogenic Influences

Human cultures have held an influential role throughout the existence of the prairie landscape. "Human land use is at once responsible for the very existence of the western Washington prairies of the Puget trough and for their extensive degradation" (Perdue 1997, 17).



**Figure 9.** Lupine (*Lupinus lepidus*) in Foreground, Scotch Broom (*Cytisus scoparius*) in Background (TNCWA 2008b)

In the context of this thesis, anthropogenic influences that have affected the prairie biome will be based on the definitions provided by the Society for Ecological Restoration International (SERI). The terms refer to ecological conditions that have deviated from an intact ecosystem. Degradation refers to the “subtle or gradual changes that reduce ecological integrity and health” (SERI 2004). An example of degradation is the introduction of non-native invasive species, such as Scotch broom, or the suppression of wildfire. Such effects are anthropogenic influences that gradually alter or degrade the environment. Damage pertains to “acute and obvious changes in an ecosystem” (SERI 2004). Damage occurs when disturbances, such as Scotch broom invasion, inhibit natural processes. The term “destroyed” refers to an ecosystem that has been degraded or damaged to the extent that all macroscopic life has been removed. Transformation refers to the complete “conversion of an ecosystem to a different

kind of ecosystem or land use type” (SERI 2004). The conversion of prairie landscapes to agricultural land or urban development is an example of transformation. Throughout the existence of this unique landscape, human beings have implemented management techniques that have directly led to the creation, degradation, damage, destruction, and transformation of this landscape.



**Figure 10.** Field of Scotch Broom (*Cytisus scoparius*) at Glacial Heritage Preserve (TNCWA 2008b)

The historic influence of southwestern Washington Native American cultures is associated with the development of the prairie biome (Leopold 1999). Early Native Americans were considered to be the first managers of the prairie landscape (Perdue 1997). They were collectively known as the Salish people, although this region was actually occupied by multiple tribes (Perdue 1997). Pre-European conditions have been documented using methods such as ethnographic records, testimony by early Euro-American explorers, and palynological records (Leopold 1999). Historic indigenous influences include the use of wildfire

regimes, the cultivation of food plants, and influence of native plant distribution (Perdue 1997). Native peoples used fire to stimulate growth of desired flora and to maintain prairie edges against forestland. Management regimes were conducted in a manner that ensured the on-going health and continual harvest of prairie flora and fauna (Lombardi 1997). Native plant food sources, including blue camas (*Camassia quamash*), wild strawberry (*Fragaria virginiana*), fine-leaved lomatium (*Lomatium utriculatum*), kinnikinnick (*Arctostaphylos uva-ursi*) and chocolate lily (*Fritillaria lanceolata*), were cultivated (Lombardi 1997). Native plants like these are among the most valued of local prairie flora. Hence, through balanced utilization of prairie bounty, native peoples were able to sustainably co-exist with this unique landscape.

The settlement of southwestern Washington by non-natives marked the beginning of new types of anthropogenic influences. Euro-American dominance in the region drastically accelerated environmental change. Although earlier explorers traveled through this region, the first settlement of the South Puget Sound did not occur until the Hudson Bay Company established Fort Nisqually in 1833 (Perdue 1997). The grazing of sheep and cattle on prairie lands was an initial land management action of early settlers. By 1850, the lands were opened to settlement under the Donation Land Claim Act (Center for Columbia River History 1850). This led to the fencing of open spaces, overgrazing, agricultural activities and the intentional and unintentional introduction of non-native species. Among the most detrimental of early non-native impacts was the suppression of



wildfires (Perdue 1997). Wildfire suppression has allowed the accelerated invasion of noxious species, along with the encroachment of adjacent forest.

South Puget Sound prairies continue to suffer degradation, damage, destruction, and transformation from processes such as the transformation of prairies into agricultural or forestlands, military disturbances, and the encroachment of urban development (Perdue 1997). In addition, global environmental alterations, such as climate change, now threaten these shrinking lands.

Conversely, there is another chapter to human relationships with the prairie landscape. The establishment of publically owned prairie preserves and the growing community of prairie restoration enthusiasts, mark the beginning of a new era of prairie management. Examples of present restoration efforts include the removal of noxious species, the reintroduction of native species, and the reintroduction of wildfire (TNCWA 2008c).



**Figure 11.** Prescribed Burn at Glacial Heritage Preserve  
Photograph courtesy of Dan and Patricia Montague.

Current restoration efforts are a proactive method of returning the prairie landscape to a semblance of the ecosystem maintained by indigenous peoples of the past. Thus, ecological management has occurred in some method for centuries, tying this landscape to historical and present local human communities (Palmer et al. 2006).



**Figure 12.** Glacial Heritage Preserve Following Prescribed Burn  
Photograph courtesy of Dan and Patricia Montague.

Today, TNC employees and volunteers work to conserve native ecological communities. TNC strives to restore and maintain the ecological conditions necessary to conserve priority conservation targets (Dunn 2009). The Glacial Heritage Preserve has become a central focus of local prairie advocates through volunteer work, educational projects, and increasing community outreach (TNCWA 2008a). Figure 13 illustrates The Nature Conservancy's 2008 strategic goals for the Glacial Heritage Preserve. It is significant to note that volunteer efforts are a key focus of these goals. This emphasizes the importance of

understanding volunteer experiences and knowledge of the Glacial Heritage Preserve.

### **TNC Strategic Goals for the Glacial Heritage Preserve**

- 1. Act as a core holding for conservation in the South Puget Sound region. Provide a mosaic of healthy, natural habitats that support native plants and animals, including rare species.*
- 2. Continue as a demonstration site for restoration strategies and techniques and as a model for public/private partnership. Strive to improve these techniques and partnerships continually.*
- 3. Integrate public volunteers and other groups into restoration and conservation activities on the site, to create a core constituency supporting the site and prairie conservation.*

**Figure 13. TNC Strategic Goals for the Glacial Heritage Preserve**  
(TNCWA 2008a, 2)

### **The South Sound Prairie Volunteer Group**

The South Sound Prairie Volunteer Group began in 1996 as a localized effort to restore the Glacial Heritage Preserve. Initially, volunteers met on the second Saturday of every month, but as interest grew, a weekly Tuesday work party was added. The weekly volunteers are collectively called the “Tuesday Group,” while those who volunteer on a monthly basis are informally referred to as the “Second Saturday Group.” Prairie restoration volunteer opportunities are advertised through a variety of sources such as local newspapers, TNC websites and Washington TNC’s bi-monthly volunteer newsletter. One volunteer even

reported finding the South Sound Prairie Volunteer Group through the website [volunteermatch.org](http://volunteermatch.org) (Cahill 2008).

The volunteers themselves are derived from a variety of backgrounds and locations. The longest standing (and some of the most dedicated) volunteers are retired individuals who dedicate several days a week to prairie restoration around the Puget Sound area. Some of these individuals have been volunteering for up to 12 years. Students make up another large portion of the volunteer base. TNC trains and provides internships to students from The Evergreen State College (TESC), the Student Conservation Association (SCA), AmeriCorps and Washington Conservation Corps (WCC). The presence of AmeriCorps and TESC interns has grown over the last two years as trainee contributions have proven to be fruitful (Marschner 2008).

In 1997, numerous local advocates, associated with the South Sound Prairie Volunteer Group, formed a small nonprofit group called Friends of Puget Prairies (FOPP). FOPP works in conjunction with TNC, heading the organization of a day-long community education event, Prairie Appreciation Day (PAD). PAD is a full-day educational event, in which the restricted-access nature preserve is open to the public. In May of 2008, over 450 people attended (FOPP 2008). FOPP members are also an integral part of local outreach through the making and selling of cards, which feature volunteer photography of local flora and fauna. Profits from the cards are used to purchase supplies used by FOPP and the South Sound Prairie Volunteer Group.

Although not all South Sound prairie volunteers are members of FOPP, the two groups work closely together and numerous individuals volunteer for both programs. Originally, volunteers organized FOPP to become more professional in regards to how they organized PAD. Yet, having their own non-profit has given volunteers more say in restoration activities and has made their overall effort more effective. Over the last ten years, FOPP's focus has grown to include restoration at the Glacial Heritage Preserve (Bidwell 2008). Currently, FOPP has a grant that has assisted in its work, allowing it to purchase tools and supplies that aid in volunteer restoration efforts of both the South Sound Prairie Volunteer Group and FOPP (Bidwell 2008).

Volunteers conduct a variety of duties to work toward the restoration of the Glacial Heritage Preserve. Typical volunteer duties include the removal of invasive species, collection of seeds, planting of native flora, placement of habitat structures, and educational outreach. In many cases, volunteers accomplish restoration duties that are extremely effective, yet time consuming, such as the hand-pulling of invasive species. In 2008, volunteers removed Scotch broom from 115 acres and controlled invasive conifers on more than 15 acres (TNCWA 2008d). They helped plant 12,000 native grass and wildflowers, including 5,640 golden paintbrush (TNCWA 2008d).

The focus of each work party is communicated to regular volunteers through TNC's weekly e-mail list serve. Volunteer work parties typically offer a variety of inside and outside duties to participate in. The longer an individual has volunteered with the group, the more specialized that person's role often

becomes. Long-term volunteers are more apt to participate in specialized duties that require local ecological knowledge or specialized training. These duties include activities such as the mechanical and chemical removal of invasive species, ecological monitoring, and the propagation of native plants. Long-term volunteers are also more likely to take on organizational roles, leading group activities such as the annual collection of seeds. Moreover, these individuals hold an invaluable amount of localized knowledge sometimes not held by anyone else. Skillful contributions, such as those described above, are by far some of the greatest advantages to long-term investment in volunteers.

### **The Nature Conservancy**

The Nature Conservancy is an international NGO whose mission is to “preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive” (TNC 2008). The Nature Conservancy is a professional environmental NGO that maintains and depends upon the funds of a mass membership base. Namely, although all chapters are collectively part of the same organization, each state separately manages its affairs (such as funding, land acquisition, and land management) (Birchard 2005). Presently, TNC is active in 30 countries as well as all 50 states of the U.S. and has over one million members (TNC 2008).

The roots of TNC stretch back to the formation of the Ecological Society of America (ESA) in 1915. In the organization’s infancy, there was disagreement over the official mission; should they exist for the sake of ecological research or

should they pursue action toward preservation? This question was not resolved until 1946, when scientists from ESA vowed to take direct action to save threatened areas. ESA officially became The Nature Conservancy in 1951 and by 1955 TNC began its mission of land acquisition for the sake of natural preservation. Ten years later, TNC teamed up with the Bureau of Land Management (BLM) for their first collaborative NGO-government project, which helped preserve old-growth forest in California. This laid the groundwork for future partnerships with multiple state and federal organizations. In 1980, TNC launched its international conservation programs. Currently, TNC globally protects approximately 119 million acres of land, 5,000 miles of rivers and has over 100 marine conservation projects (TNC 2008).

By 2015, TNC aims to preserve at least 10% of every major habitat type on Earth through a strategic, science-based process called Conservation by Design (TNC 2008). Conservation by Design was established in 1996 to give TNC's broad mission a more specific direction and purpose. TNC defines Conservation by Design as a systematic approach that determines where it works, what to conserve, what strategies it should use and how effective the strategies have been (TNC 2008).

The design is based upon four interrelated steps: setting goals and priorities, developing strategies, taking actions, and measuring results. Goals and priorities include both long-term and near-term restoration goals (TNC 2008). Near-term goals and priorities are the localized action of the long-term vision of achieving biodiversity survival. It should be noted that the actions of ecological

restoration volunteers play a pivotal role in the achievement of near-term goals and priorities. The second step of TNC's conservation approach is developing strategies that are tailored to meet the ecological, social, political, and economic realities of each region (TNC 2008). On a regional level, volunteer programs and local social concerns are factored into these strategies. The third step is focused on taking action, which is often place-based. Relevant examples of this step include investing in science, protecting resources, forging alliances with a variety of partners, and building social support (TNC 2008). Incorporation of volunteer programs and working alongside local NGOs are examples of two actions that take place in the South Puget Sound region. The final step is measuring results. TNC tracks the progress of its efforts to address the well-being or recovery of the identified biodiversity in relation to TNC's conservation actions. On a regional scale, TNC transforms the organization's global mission into localized conservation actions (TNC 2008).

The Washington Chapter of TNC strives to meet long-term and near-term goals by implementing conservation of the state's ecologically significant areas, through science-based solutions and local collaboration. The management of Thurston County's Glacial Heritage Preserve is an example of a locally-based collaborative effort that also aids in the achievement of global conservation goals (TNCWA 2008c).

The South Sound Prairie Volunteer Group is managed through the South Puget Sound field office, which is located in Olympia, Washington. This branch is under the umbrella of the Washington Chapter of TNC. The Washington



Chapter's main office is located in Seattle. Local restoration activities, including volunteer contributions, are coordinated through the field office in Olympia. However, representatives from the Seattle office are still regularly involved in prairie restoration and outreach activities (Marschner 2008).

The South Sound Prairie volunteer program is officially coordinated by the Mima Prairie Land Steward, who was Carri Marschner at the time of this research. This position, which is fairly unique within TNC, was created in 2005 to address additional management needs. Only a handful of volunteer coordinator positions exist throughout all of TNC (Marschner 2008). Coordination of the continuously expanding volunteer program is a key part of the Land Steward's responsibilities. In 2005, an internship program through The Evergreen State College was added (Dunn 2009). In 2006, two AmeriCorps positions were created to assist in the management and outreach of the prairie restoration efforts, including regular involvement with the volunteer program (Marschner 2008).

## **Discussion and Conclusion**

This chapter has examined the historic and current events that have led to the present conditions of South Puget Sound prairies. The influence of anthropogenic actions was discussed at length. Anthropogenic actions have held a significant role in both the development and decline of the prairie biome. Today only 3% of South Puget Sound prairie habitat remains (Dunn et al. 1997). The disappearance of this dynamic ecosystem led to the decline of fragile flora and fauna, many of which are found in the Glacial Heritage Preserve.

This chapter illustrates how local conservation actions directly relate to national and global environmental initiatives. Over the last twelve years, South Sound prairie volunteers have diligently dedicated time, energy, and love to the restoration of the second-largest prairie preserve in western Washington. Multiple government agencies, tribes, and NGOs are involved with the management of this landscape. Although the South Sound Prairie Volunteer Group works under the direction of TNC, they regularly work alongside professionals and volunteers from other organizations. The restoration work accomplished by these volunteers benefits governmental, nonprofit and tribal conservation initiatives. Furthermore, by assisting TNC in realizing near-term conservation goals, the South Sound prairie volunteers are contributing to the NGO's long-term global vision and the ecological restoration movement as a whole.

This thesis shows that volunteer work has become an invaluable assistance to local conservation efforts and that much can be learned from the individuals who faithfully conduct this work. South Sound prairie volunteers represent the dynamic development of modern anthropogenic relationships with nature. The challenges these individuals face are conditions that have yet to be grappled with. Yet, successful integration of a new-found land ethic, through ecological restoration, creates hope and an avenue of action that may reenergize the environmental movement.

## **Chapter 4 – Findings: The Voice of South Sound Prairie**

### **Volunteers**

*The people. . . . Nature Conservancy's got some awfully good people – we have some awful good volunteers.*

Doug Whitlock  
Glacial Heritage Preserve volunteer for 6 years

Ecological restoration would not be possible without the efforts of numerous giving individuals. Over the past twelve years, the South Sound Prairie Volunteer Group and TNC staff have worked together to restore and maintain this dynamic habitat. This chapter explores the accomplishments of the volunteers through analysis of semi-structured interviews.

To begin with, I will describe the design of this research, the methods of validity, the sample analyzed, and justification of choice for an elaborated case study. This research was conducted as a qualitative case study, using data gathered through multiple methods, such as semi-structured interviews, participant observation, photography, and an extensive literature review. Next, I will provide a detailed description of volunteer demographics, including the biases associated with data derived from this sample. In addition, I will take a critical look at the strengths and shortcomings associated with interpretive qualitative research. The bulk of this chapter is devoted to portrayal of my analysis. Research results were organized into three themes and ten sub-themes. Relevant quotes and passages derived directly from the interviews are shared to give the data a personal voice. Finally, this chapter concludes with suggestions

for how land managers can incorporate these research findings into their own volunteer programs to strengthen their ability to retain long-term volunteers.

The South Sound Prairie Volunteer Group was analyzed as an elaborated case study based on the methods of Ruben and Ruben (2005). An elaborated case study is defined as a research method that seeks to understand what happened, why and what the case means in relation to a broader scale. The underlying purpose of an elaborated case study is to enable the researcher to generalize results to broader processes, populations, or phenomena (Ruben and Ruben 2005). I conducted my interviews with the underlying goal of gaining a comprehensive understanding of South Sound prairie volunteers, their motivations for volunteering with TNC, and the social qualities and group motivations that have led to long-term volunteer dedication and the accomplishment of TNC restoration goals. My research explores the restoration work accomplished by the South Sound Prairie Volunteer Group and the effects that volunteer efforts have had upon local restoration projects.

Although the data collected only represent the opinions and experiences of individuals involved with this group, conclusive analysis is extended to other ecological restoration volunteer groups by presenting suggestions that may strengthen other environmental volunteer programs. The choice of a case study framework to study ecological restoration volunteers is a conventional research method that has been widely employed. Namely, other organizations can benefit from the lessons derived from a single case study.

Numerous methods of data collection were used to gather research for this

study. Semi-structured interviews were conducted and analyzed. Previously prepared questions were posed during the semi-structured interviews as a method of initial topical guidance for the conversations. No steps were taken to influence or restrict the response of the participants. Additional questions were spontaneously included as the interview conversations progressed. The majority of the information derived from participants was qualitative in nature, although a small amount of quantitative data was also gathered.

The interviews were next transcribed, thoroughly reviewed, and finally systematically coded for overriding themes (or qualities), which repeatedly emerged. Dominant themes were deciphered in relation to past research conducted in this field. Three dominant themes were identified, namely Volunteer Experiences, Shared Values, and Volunteer Motivations. Figure 14 portrays all themes and sub-themes.

<b>Theme</b>	<b>Sub-theme</b>
<b>Volunteer Experiences</b>	Observation of Change Knowledge and Education Enjoyment of Restoration Activities
<b>Shared Values</b>	Social Cohesiveness Shared Environmental Ethic Sense of Ownership Love of Prairie Landscape Satisfaction with The Nature Conservancy
<b>Volunteer Motivations</b>	Environmental Concern Ability to Make a Difference

**Figure 14: Themes and Sub-themes**

Relevant sub-themes were coded and categorized under each of the three themes. All sub-themes were first coded with a letter label. Identification of themes was based on factors such as repeated use of a specific word (i.e. ownership) or upon detailed conversational topics that clearly illustrated one of the identified themes (i.e. such as a volunteer story that was based around the idea of feelings of personal ownership of the Glacial Heritage Preserve). Next, the common themes were conceptualized and summarized for their shared meaning. Based on the methods of Ruben and Ruben (2005), analysis of these concepts across different interviews was combined into a coherent whole to create a complex and applicable theory. Relevant quotes and passages that clearly identified all themes and sub-themes were presented to provide the reader with a narrative comprehension, which stemmed from the words of the volunteers themselves.

Participant observation was another research method employed in this study. From January to June of 2008, I volunteered for the TNC alongside numerous members of the South Sound Prairie Volunteer Group. This allowed me to gather information about the group's history, observe the participant's relationships with one another, and see the restorative influence volunteer efforts are having upon the prairie biome. Weekly interaction with the volunteers allowed me to develop friendships and gain their trust, which encouraged the participants to share their personal stories, joys and concerns. Furthermore, through contributing to the restoration of the Glacial Heritage Preserve, I was able to gain a first-hand understanding of the long-term commitment such a restoration

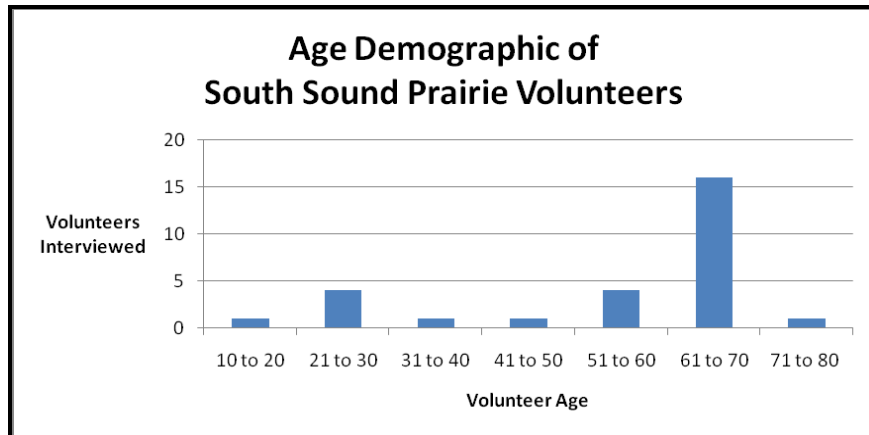
endeavor entails.

Multiple methods of internal and external validity were employed to assure the trustworthiness and reliability of this research. Data triangulation was conducted in order to cross-check information. Over the course of the six months I volunteered with TNC, I kept a detailed field notebook as a record of my participant observation. These records include observation of daily activities, relationships, and summarization of informal conversations. In addition, I recorded my personal experience of volunteer participation. The significance of credibility through transparency is a relevant part of qualitative research of this nature (Ruben 2005).

South Sound prairie volunteers who work on the Glacial Heritage Preserve were the participants who contributed to this study. Participation was open to all individuals who volunteered with the South Sound Prairie Volunteer Group. Volunteers were contacted in person at the Glacial Heritage Preserve. Interviews were conducted on TNC-organized volunteer days during the month of April. All interviews were timed around the weekly activities of the participants. A total of twenty-nine volunteers were interviewed. (Four employees and one past employee were interviewed as well, but their testimonies were not included in the volunteer analysis.) TNC recorded thirty-seven individuals to have volunteered in the month of April, and a total of 130 volunteers over the entire year; therefore, I was able to interview 78% of the volunteers who participated in April, and 22% who participated in 2008 (Evans 2009a).

In 2008, the South Sound Prairie Volunteer Group donated 3417.1 hours of restoration work and traveled 1054.9 hours to and from the Glacial Heritage Preserve. In April alone, volunteers donated a total of 451 hours and traveled 157.5 hours. It should be noted that volunteers are not compensated for their travel expenses. Some participants travel up to 3 hours, round-trip, to volunteer at the Glacial Heritage Preserve (Evans 2009b).

Participants were asked to share basic demographic information, such as age, gender, and profession. The sample was 59% male and 41% female. Retired individuals made up 52% of this sample. Individuals who are employed made up 31% and students were 17% of the sample. This includes two AmeriCorps interns, two TESC interns and one home-schooled student. Age demographics are displayed in Figure 15.

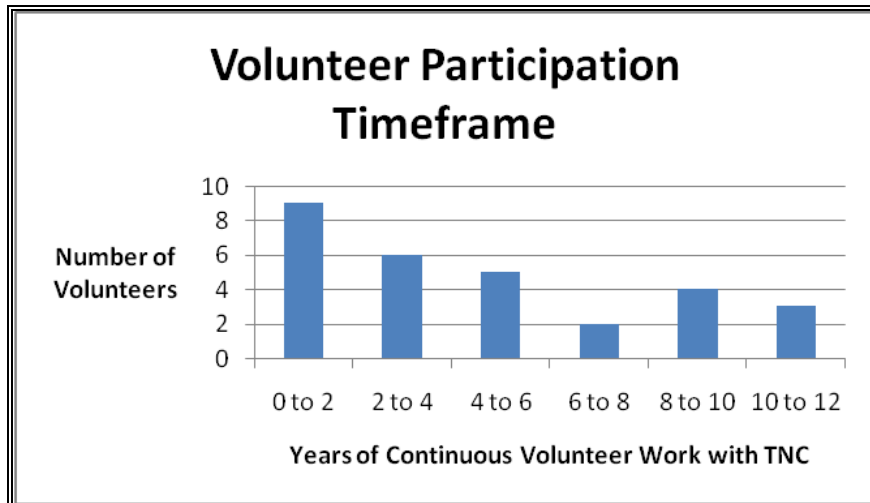


**Figure 15: Volunteer Age Demographics**



As portrayed, 64% of the individuals who were interviewed were sixty or above. (One volunteer declined to share age and was not included in this statistic.) This coincides with the large number of retired individuals who volunteer with the South Sound Prairie Volunteer Group. Five of the volunteers who were thirty or under were engaged in education or internships. Lastly, the middle age bracket, thirty-one to sixty-one, consisted of the volunteers who were employed. It should be noted, that 100% of the employed participants were interviewed during the Saturday work party, rather than the Tuesday work volunteer day. Retired individuals and students are more apt to have flexible schedules, which allow them to participate in weekday activities, while many employed individuals are only available for volunteer activities on the weekends.

Participants were also asked to share how long they had volunteered with the South Sound Prairie Volunteer Group. Individuals who had participated for a variety of timeframes were interviewed with the purpose of collecting a diversity of viewpoints. In the sample, two individuals were volunteering with the South Sound Prairie Volunteer Group for the first time. On the other side, seven individuals had volunteered with the group for the last eight to twelve years. New volunteers were interviewed to gather first-hand impressions, while longer-term volunteers were interviewed to gather developed opinions, historical information, and localized knowledge. Figure 16 displays the distribution of how long the interviewed participants had volunteered.



**Figure 16: Volunteer Participation Timeframe**

It should be noted that there may be limitations associated with this volunteer population. Demographics can play an influential role in one's perception. For example, over half of the participants were retired. Perhaps their values, experiences, and motivations differ from those of younger generations. Time of year is another influential factor. I conducted this research during the busy month of April, a time when volunteers anticipate spring and are busy preparing for PAD. Moreover, this study would have differed in some way had I conducted it in any other month of the year. Volunteer turnover is another factor to consider. Certain volunteers, such as student interns, volunteer on a selected timeframe, and tend to only be involved with the group for a limited amount of time. Other volunteers vacation certain months of the year and would not have been available to interview had I conducted this research at a different date.

Interviews focused on the participants' involvement in the volunteer

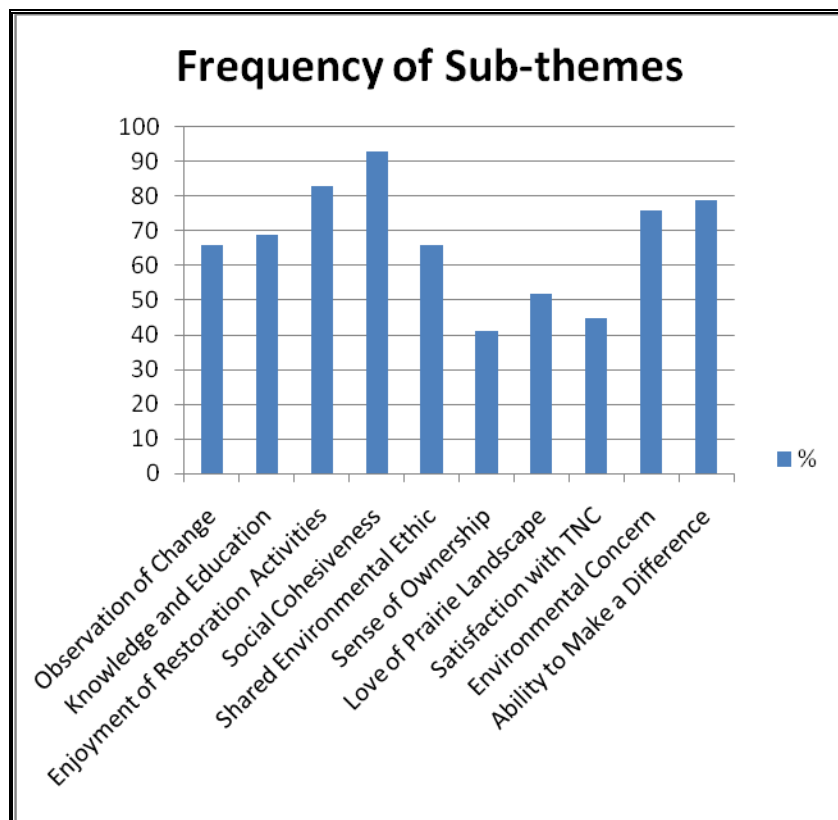
activities that are conducted on the Glacial Heritage Preserve. Participants were asked to describe the length of time over which they had volunteered, the changes they had observed, the main duties they conducted, what they viewed as strengths of the volunteer group and, finally, how they believe the volunteer program could be strengthened. A copy of the interview questions is included in Appendix I.

I chose to focus my graduate thesis on this particular population sample for numerous reasons. To begin with, the South Sound Prairie Volunteer Group has accomplished a vast amount of restoration work on the Glacial Heritage Preserve for Thurston County and TNC. Small, localized, volunteer groups who work in conjunction with TNC are a population that receives little public acknowledgement, in comparison with the rest of the organization. Yet, this group accomplishes restoration work that would not otherwise be completed. At the same time, they have accumulated localized ecological knowledge not held by anyone else. I believe that lessons learned from this case study could benefit other TNC volunteer programs and similar environmental organizations. Through the use of semi-structured interviews, volunteers were given the freedom to discuss the above topics in a manner that suited them. This gave me the advantage of gathering honest opinions and feelings. The effectiveness of single-case generalization to a larger population is echoed by Ruben and Ruben (2005).

Dominant themes prevalent within the interviews reflect the behavior and habits observed through participant observation. It should be noted that all of the selected themes are interrelated and overlap. Concepts were selected due to their repeated appearance in interviews and were grouped to clearly display closely

related ideas. Moreover, throughout the discussion of my findings, I will demonstrate the cause-effect relationship between characteristics displayed by the participants and the phenomenon of long-term volunteer dedication.

Figure 17 displays the frequency of each of the sub-themes. Eight out of the ten sub-themes identified were expressed by over half of the volunteers. Five out of the ten sub-themes were expressed by 69% or more of the volunteers.



**Figure 17: Frequency of Sub-themes by Percentage**

Social Cohesiveness was the most dominant sub-theme identified. In fact, 93% of the participants identified social fulfillment as an area of personal

inspiration and satisfaction. Enjoyment of Restoration Activities (83%) was the next highest, followed by Ability to Make a Difference (79%) and Environmental Concern (76%). Hence, experience of restoration activities combined with environmental concern appear to influence participants' desire to volunteer long-term.

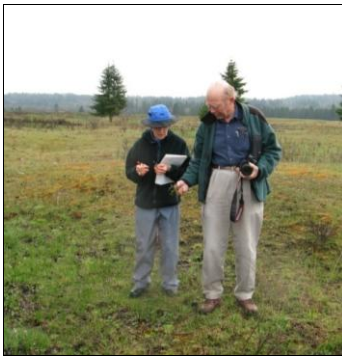
The lowest two sub-themes Sense of Ownership (41%) and Satisfaction with TNC (45%) were identified by over one-third of the participants. Although these sub-themes were not as prevalent as the other attributes, they were included for the significance of what they represent. The concept of ownership plainly overlaps other sub-themes such as Love of the Prairie Landscape, Shared Environmental Ethic, and Observation of Change. Satisfaction with TNC was included because the concept was expressed so adamantly by those who brought the topic up.

Finally, it is significant to note the limitations associated with a qualitative case study. To begin with, one must be cautious in applying generated conclusions to other populations. Some of the data gathered in this study can only be applied to the South Sound Prairie Volunteer Group. Because data was gathered through semi-structured interviews, each interview was unique and covered slightly different topics. A challenge associated with this research framework is the organization and analysis of the wide array of information shared by the participants. On the other hand, the emergence of themes through the direction of the participants is a great strength. The researcher can get to the heart of what people really think and believe by simply listening to them.

Moreover, the reader must be aware that all of the conclusions drawn are my interpretations of the volunteer interviews, the group's history, relationships with one another, and their accomplishments. Although my interview base was extensive, I was by no means able to speak with all who are associated with this volunteer group. As stated, I interviewed 78% of the South Sound prairie volunteers who volunteered during the month of April and 22% who volunteered in 2008 (Evans 2008a). Therefore, there are opinions and experiences that were not included in this study.

### **Volunteer Experiences**

Volunteer Experiences was identified as one of the three main themes to emerge during the interviews. This theme was selected to portray how the volunteers perceive and feel about their activities. Sub-topics for this theme are as follows: Observation of Change, Education and Knowledge, and Enjoyment of Restoration Activities. Personal benefits associated with volunteering were a major facet of this theme. Dedicated volunteers value education and skill development, the opportunity to spend time in a unique, beautiful habitat, and the actual physical practice of restoration work. In addition, long-term volunteers are much more likely to participate in restoration activities that require training and skill development, which enables them to contribute to projects using advanced methods that lighten the load of professionals in the restoration field. Figure 18 shares photos of volunteers conducting a variety of restoration duties.



**Figure 18: Volunteer Photos**

From left to right: Darlene Bidwell (TNCWA 2008b); David Hepp, Kathy Whitlock, Barry & Darlene Bidwell at Shotwell's Nursery (TNCWA 2008b); Patricia & Dan Montague (TNCWA 2008b); Tosh Hickmann & Brad Gill Gather Plugs (TNCWA 2008b); Don Guyot and Beverly Heebner Plant Forbs (TNCWA 2008b); Barry Bidwell Surveys Butterflies (TNCWA 2008b); Doug Whitlock Removes Invasive Conifers (TNCWA 2008b)



From left to right: Dennis Plank (TNCWA 2008b); Doug Whitlock Burns Piles (TNCWA 2008b); Michael Jarisch Treats Invasive Forbs (TNCWA 2008b); David Hepp & Cherry Pedrick Build Bat Boxes; Barry Bidwell, Eli Evans, Carri Marschner, & Patricia Montague (Photograph courtesy of Dan and Patricia Montague.); Volunteers Plant Native Forbs; Marion Jarisch Organizes Cards





From left to right: Tosh Hickmann Teaches About Bees at PAD (Photograph courtesy of David Hepp.); Volunteers Plant Native Forbs (Photograph courtesy of Dan and Patricia Montague.); Cliff Snyder as Big Blue the Gopher, PAD (TNCWA 2008b); Michael & Marion Jarisch Organize Forbs (TNCWA 2008b); Michelle Blanchard (TNCWA 2008b); Volunteers Burn Piles of Invasive Conifers (Photograph courtesy of Dan and Patricia Montague.); Dan Montague Monitors Vegetation (TNCWA 2008b)



From left to right: James Boone & Colleen O’Shea Plant Native Flora (TNCWA 2008b); Volunteers Remove Scotch broom (*Cytisus scoparius*) (Photograph courtesy of Dan and Patricia Montague.); John Crawford; Barry Bidwell & Marion Jarisch (TNCWA 2008b); James Boone (TNCWA 2008b); Volunteers Burn Piles of Invasive Conifers; Angela Kubalek Records Her Day

As stated, volunteers accomplish a substantial amount of work for environmental restoration programs. Increased understanding of volunteer experiences can assist land managers in the strengthening of their volunteer programs. Fostering of such experiences can lead to increased dedication. Further, volunteer appreciation of such experiences is related to both personal and collective social values. The combination of meaningful restoration experiences and the enactment of one's values are directly tied to volunteer motivations and, thus, long-term dedication.

### Observation of Change

Observation of change was one of the dominant topics discussed within the interviews. Sixty-six percent of the participants cited the observation of change within the prairie landscape as one of the main reasons they choose to continually volunteer. Examples of ecological changes the volunteers described included seasonal, annual, and restoration-related change. The acknowledgement of enjoyment in observing change is significant because it is one of the experiences that foster ownership, dedication, love of place, and environmental values – ideas that encompass numerous sub-themes.

*There's a real history of this place wrapped up in the group. . . .  
Even in my time you can see big changes and that's exciting.*

David Hepp  
Glacial Heritage Preserve volunteer for 5 years

Seasonal cycles were a common type of change described by the volunteers. Experience of an ecosystem in multiple seasons is significant because

it provides individuals with localized experiential knowledge necessary for the long-term restoration of ecological preserves. The following transcribed passages illustrate this concept through the volunteers' descriptions of seed collection and propagation.

*Another thing I really like is seeing the plants year round. I know what the plants look like when they are first coming up out of the ground and when they are flowering and in seed – year round – and then we get to plant the seeds that we collect and grow them in the nursery and then finally plant them out in the prairie and watch 'em grow out on the prairie – its fun.*

Tosh Hickmann, Homeschooled  
Glacial Heritage Preserve volunteer for 4 years

*So, you get to see the whole cycle. . . the whole succession of bloom.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

In addition to the personal benefits gained by volunteers, volunteer programs also benefit through enabling their members to experience long-term change. Observation of ecological and restoration-based changes creates feelings of ownership and personal identification. Furthermore, many of the seasonal changes observed by volunteers would not be possible without their very own efforts. The following excerpt illustrates this point.

*Well, there is decidedly less Scotch broom. There is a slow decrease in the number of invasive Douglas firs on the prairie. The number of visible native plants – forbs – is increasing. Restoration has significantly occurred. The number of Tuesday volunteers has significantly increased. It's ah; it's a lot of fun.*

Cliff Snyder  
Glacial Heritage Preserve volunteer for 12 years

The widespread removal of noxious species, largely due to volunteer efforts, is an example of extensive ecological restoration success. This collective effort has allowed volunteers to observe flora and fauna that may have otherwise vanished.

*Well, I think the biggest change is the esthetic and visual one. That there is just so much more of it (prairie flora) now that it is cleaned up – apparently cleaned of broom. It looks so much more like a prairie and since I was a landscape architect the aesthetic thing has always been high on my mind. I see something that looks ugly, like a little patch of broom; I want it out of there! It just doesn't look right! So, I think that is the most obvious thing.*

David Hepp

Glacial Heritage Preserve volunteer for 5 years

Anticipation of the next season, combined with an attuned knowledge of the land, creates an emotional connection. This connection is then transferred into dedication, motivation and hundreds of hours of work.

*I've pulled broom in the sleet and the snow. It's a little bit harder to do, but it can be done!*

Michael Jarisch

Glacial Heritage Preserve volunteer for 10 years

The next passage describes one volunteer's reflection on the significance of volunteering in the same location for an extended period of time. Long-term commitment enables volunteers to know and connect with the area they are working to restore.

*What I really like about the volunteers is that they are so committed to the project and that has made me see that volunteering is really important. But it's also great if you can volunteer with the same organization and be involved in the same project over time. So that it's not just like – oh I'm volunteering at this place, this place, this place throughout the year. You're*

*volunteering at one place and so you can get connected with – can really get connected with the efforts of the organization and I feel that the volunteers have been doing this for a while and they – they know more than I do about the prairie – so they have really helped me learn a lot.*

Colleen O’Shea, AmeriCorps Volunteer  
TNC volunteer for 7 months

Through the fruit of their efforts, volunteers have seen widespread changes in the landscape of the Glacial Heritage Preserve. The radical reduction of Scotch broom, due to vigorous removal efforts, is noted as the most visually obvious change in the prairie landscape. Scotch broom is an invasive woody evergreen shrub that was introduced to the Pacific Northwest in the 1860s. The shrub is exceedingly disruptive in the prairie landscape, displacing native grasses and forbs, while altering the natural community structure and wildlife habitat (TNCWA 2008a). Long-term volunteers shared stories of “old-growth” Scotch broom that towered overhead, reaching heights of ten to twelve feet. When one drove a car down the main corridor of the preserve, the broom formed a dark and deep tunnel.

*I have seen an immense amount of changes. I used to ride my horse out here when it was all Scotch broom and you couldn’t see the horses when we would be riding out here – all you could see was our heads bobbing up and down. ... That’s how bad it was. This place was terrible for the longest time. You couldn’t see anything. I didn’t even know there was a prairie out here. ...but once we started taking the broom off, suddenly we began to realize what a beautiful spot this is.*

Michelle Blanchard, Volunteer and Adjacent Landowner  
Glacial Heritage Preserve volunteer for 12 years

A common theme voiced by volunteers was the sense of accomplishment they felt at the end of the day. Restoration efforts produced physical changes one

could observe and volunteers described this as being immensely satisfying. Further, the longer an individual was involved with the group, the greater the changes they were a part of. These changes were the central theme in many of the stories volunteers shared. The following testimony illustrates one volunteer's experience of change on the Glacial Heritage Preserve over the past 12 years.

Interviewer: What would you say are the biggest changes or the biggest accomplishments that you have seen?

*Well, I think we all understand what Scotch broom is. Thirteen years ago this place [the Glacial Heritage Preserve] was all Scotch broom. Look at it now.*

Interviewer: What was it like approaching that? Wasn't it daunting?

*It was very daunting because some of the stuff had been here for ages. It was like eight to ten feet tall. We didn't understand what worked best for controlling Scotch broom. We have learned a lot about the physiology of Scotch broom – like the older stuff you can cut it down and it usually won't come back or if it's too young it will die because it doesn't have any energy yet. If it's somewhere in the middle (which I call the teenage years) where they're about three to four feet tall – vigorous.*

Interviewer: Uh, huh – they're mean

*You cut 'em off and they pop right back up. So we have learned what to do with what level of age. So, no, this is one of the most satisfying things I can imagine – seeing the broom being controlled and the prairie back to what it used to be in the old days, even though there are invasives out there that will never be controlled completely, but at least the prairie can be a prairie again.*

Barry Bidwell  
TNC volunteer for 23 years

The development of prairie restoration activities and duties is the final kind of change to be discussed. Namely, duties of the South Sound Prairie

Volunteer Group have evolved alongside of TNC's management of Glacial Heritage Preserve.

*Everybody learns what needs to be learned and does what has to be done and somehow it all works.*

Beverly Heebner  
Glacial Heritage Preserve volunteer for 5 years

The final excerpt shares the role volunteers played in the establishment of Shotwell's Native Plant Nursery. The nursery serves as a chief location where local plant propagation occurs. From the beginning, volunteers have been actively involved in propagation efforts.

*The amount of actual preparing the prairie areas and planting has increased every year. One of the things we did about seven years ago was we built about six propagation tables and collected the seed and we got the dirt and it was totally volunteer activity – almost totally volunteer. And then, finally, the idea caught on that it would more practical for TNC to actually be growing their own plants instead of trying to deal with contract nurseries for everything. They had more control over it and it was actually cheaper. ....and then this grew to a couple of dozen tables and then they had the opportunity to get Shotwell's.*

Marion Jarisch  
Glacial Heritage Preserve volunteer for 10 years

As is illustrated in the above passages, long-term volunteers contribute to the establishment of TNC programs and contribute to restoration projects in a skillful manner. For example, South Sound prairie volunteers have managed projects for the Olympia Field Office, such as native plant propagation and seed collection, which TNC did not have the staff or budget to accomplish. This topic is further discussed under the sub-theme Knowledge and Education.



## Knowledge and Education

Knowledge and Education was the next sub-theme to be examined. Sixty-nine percent of the participants focused on this sub-theme. This category can be examined from various angles. For example, some volunteers, such as students and interns, donated their time in order to gain professional training and career development. Other volunteers, such as retirees, sought to learn about ecological functions and prairie restoration techniques for the simple joy of learning or to address their restoration concerns. However, it should be noted that, whatever the motive, accumulation of knowledge and education provided empowering benefits to the volunteers. The following four testimonies illustrate the various forms of developmental activities that volunteer's value.

*Well, I think the biggest reason I wanted to do this was to get experience in – sort of – a field that I didn't have any experience in before.*

Peder Engelstad, AmeriCorps Volunteer  
TNC volunteer for 9 months

*We were homeschooling and I was looking for some sort of a volunteer thing for us to do as part of our homeschooling and I wanted something that was on-going, that we could do every week. And Tosh loved nature and outdoors and I started thinking of environmental groups.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

*And the level of interest and the depth of understanding that is represented by the participants is incredibly high. I have enjoyed that very much. Learning, not just propagating, but what these plants are and why they are important; what the Native Americans did with the plants, horticulturally and culinary (they were using gourmet techniques with salmon and camas 5,000, 8,000 years ago and all of a sudden we think it is cool to put scallops with salmon – it's the same business – very little is new under the sun I guess); and there is Cliff who knows everything there is to know about the*

*geology of the area; and then Dan and Pat who know nomenclature; and it's just very much a family and the more I become involved the more I want to be involved and I find that a whole lot of people with the same sorts of attitudes [are] working to do pretty much the same thing that I was interested in doing. ... So knowledge, I guess, and the commitment are the reasons I have stayed here.*

Don Guyot, Retired  
Glacial Heritage Preserve volunteer for 2 years

*Well, from an academic perspective, I think that I always learned so much more fully when I'm actually doing it and not just studying about it in the classroom and I had a lot of – like, Deag supplied me with a lot of, like, reading and literature to, like, augment my field work – so I feel like I got the classroom component along with being out in the field and that was really strong and, like, being able to, like, work with the plants, like, on a daily basis and getting to see them repetitively instead of just looking at one under a microscope once and have things repeated day after day, I think installed that information much stronger and other strengths – I feel like it's pretty good work – like the restoration work that they're doing is valuable work, so it's nice to know that my efforts are going towards, like, a larger picture that I believe in.*

Angela Kubalek, TESC Intern  
TNC volunteer for 4 months

The following excerpt illustrates how one volunteer views his involvement as a chance to experience the scientific career he had always dreamt about.

*When I went to college in 1964, I told everybody that I wanted to be an ecologist, which was akin to telling people that you wanted to be a Martian, in those days. I always had a strong interest in the outdoors. I'm a hiker, hunter, nature watcher, wildlife photographer and I wanted to be a biologist. Unfortunately, life is not a convenient experience and as a result I am not employed in the biological profession. ... When I came up here, I knew that I was going to do something related to the outdoors, obviously, and this happened to be a good fit. My intention is that when I retire, four or five years from now, I will become a full time volunteer scientist. ... I suppose it is possible that as a retiree I could end up working in some biological capacity, but it's more avocational, than vocational.*

Stephen J. Rutkowski  
Glacial Heritage Preserve volunteer for 5 years

The above testimonies have illustrated the benefits and enjoyment volunteers have derived from educational opportunities. Yet, it is significant to note that fostering personal benefits for volunteers also benefits the restoration programs. Trained volunteers can accomplish duties that require advanced training such as ecological monitoring or educational outreach. For example, when the South Sound prairie restoration efforts began, invasive species removal was the main task that volunteers conducted but, as the prairie was cleared of Scotch broom, numerous volunteers were able to focus on skillful tasks such as ecological monitoring or seed collection and propagation. In the case of the South Sound Prairie Volunteer Group, the longer an individual has volunteered with TNC, the more advanced duties they have often chosen to take on.

Interviewer: Don't you always say your specialty is pulling broom?

*Well that's what we came down here to do originally, 'cause when we were looking to volunteer this was one of the things we thought we could do. I don't have any other expertise – so pulling weeds was pretty easy. We started doing that and we kept finding other things to do, and started collecting seeds and growing plants. Some of those things we still do now.*

Michael Jarisch  
Glacial Heritage Preserve Volunteer for 10 years

*I do the things around the seed. ... I started coordinating the seed collecting group and that meant basically that I would keep the schedules, keep track of what plants were going to seed, and send out emails and get people to collect seed. ... And then, I like the cleaning of the seed and I like planting it. I do still have to get in my Scotch broom pulling. Mike, on the other hand, really likes pulling Scotch broom, but he also likes growing the plants so he's the green thumb for the levisecta [golden paintbrush (Castilleja levisecta)] that we grow.*

Marion Jarisch  
Glacial Heritage Preserve volunteer for 10 years

Furthermore, educated volunteers can become an effective means of educational outreach, enabling TNC and other restoration initiatives to more efficiently achieve their environmental goals and generate public support. Development of specialized skills empowers volunteers, inspires ownership and fosters dedication.

*Evergreen and The Nature Conservancy – it's a pretty valuable educational tool for students to come out from the classroom from Evergreen and get right into it. I think that it is really important that environmental groups have ties with educational institutions. And, plus, you get your message out – you get what you are doing out to a really accepting audience. Students are always about wanting to learn about ways that they can, you know, like, what is their education gonna look like in a career path? You know, what is all the work that they do adding up to? So that's another strong component of The Nature Conservancy. I think being successful is having that educational component with the schools around here.*

Angela Kubalek, TESC Intern  
TNC volunteer for 4 months

### Enjoyment of Restoration Activities

Enjoyment of Restoration Activities is the final sub-theme that was categorized under Volunteer Experiences. This sub-theme was identified to illustrate the importance numerous volunteers placed on the actual experience of conducting restoration work. In fact, 83% of the participants expressed how they enjoyed physical activities associated with restoration work and how they simply enjoyed spending time outside.

*I really enjoy getting out and playing in the dirt.*

Angela Cahill  
Glacial Heritage Preserve volunteer for 14 months

*One of my favorite parts is, I like to collect the seeds in the summer. That's really a lot of fun. I like to help out with Prairie Appreciation Day. Those are some of the most fun parts about what we do out here.*

Tosh Hickmann, Homeschooled  
Glacial Heritage Preserve volunteer for 4 years

Volunteering in ecological restoration projects gives participants the opportunity to get out of their everyday lives and spend their time participating in activities they would not have otherwise engaged in.

*I think at the beginning Margaret and I just wanted to – we both have white collared jobs where we are just pushing paper. And we wanted to volunteer. We wanted to have a physical activity. We wanted to volunteer and do something that you could go look back at the end of the day and see some accomplishment. But we really didn't want to get stuck with committees, bureaucracies, and the hassle of running an organization, and so we have been able to find a pretty good balance here with this group... There are a lot of different ways to pull broom and so you can go out and enjoy yourself physically working.*

John Crawford  
Glacial Heritage Preserve volunteer for 5 years

*But, ah its fun, you know. Even on a day like today it's a privilege to come out here and just enjoy it.*

Doug Whitlock  
Glacial Heritage Preserve volunteer for 6 years

As ecological restoration volunteers on the Glacial Heritage Preserve, volunteers are given access to a preserve that is otherwise closed to the public. Appreciation of beauty and awe, developed from regular visitation, can be a large part of one's reverence for place.

Interviewer: What brings you out here?

*I like the prairies very much and I like the work that is going on out here. It's an opportunity to get out and see it and kind of keep*

*up a little bit with what is going on. I learned about this at the Prairie Appreciation Day several years ago. I fell I love with the weed wrench [manually operated tool designed to uproot woody flora].*

Interviewer: So what was it about the group initially, about Prairie Appreciation Day that made you want to become a volunteer?

*Partially the uniqueness of the site and the increasing rareness of sites like this and the commitment of people who have been working on this site for a really long time – 10, 15 years. You know, that was inspiring to me.*

Kay Atwood  
Glacial Heritage Preserve volunteer for 4 years

### **Shared Values**

Shared Values was another dominant theme identified. The sharing of values and morals is significant because it illustrates the collective ideals expressed by the South Sound prairie volunteers. These ideals are a driving force behind why these individuals have chosen to dedicate so much time and effort to local prairie restoration. Sub-topics of this theme are as follows: Social Cohesiveness, Shared Environmental Ethic, Sense of Ownership, Love of the Prairie Landscape, and Satisfaction with The Nature Conservancy.

South Sound prairie volunteers stressed that having close personal relationships with others who shared a similar environmental ethic, and love of prairies, influenced their desire to volunteer on a long-term basis. Furthermore, volunteering in the same area for an extended period of time and seeing the difference their actions were making led to feelings of ownership. Finally, participant perception of the organization they work under influenced their decision to volunteer.

Identification of socially shared morals is significant on a large-scale social level. Moreover, strengthening of socially supported environmental values can lead to widespread support and understanding of restoration initiatives. The theme of Shared Values is also intricately tied to the final theme of Volunteer Motivations, which is examined later in this chapter.

### Social Cohesiveness

Social Cohesiveness was the dominant theme expressed by volunteers. Ninety- three percent of the volunteers stated that social cohesiveness influenced their volunteer experience. Participants repeatedly stressed that community and regular social interaction were some of the main reasons they volunteered over a long timeframe. For many of the participants, volunteering has become a social activity as well as a public service. The following interview extracts are testimony to this point. Volunteers were asked to describe what they believe are the major strengths of the South Sound Prairie Volunteer Group.

*I think the strength of this group is simply that it has become, in some respects, a social activity and a group of friends rather than just strangers who get together once a month to volunteer. So there is a sense of – there is a core group of regulars who have turned it into a family or a community.*

Dennis Plank, TNC 2008 Volunteer of the Year (TNCWA 2008d)  
Glacial Heritage Preserve volunteer for 10 years

*I think the strengths of the volunteer program are the community building that it does and the relationships that I find the volunteers having with themselves; that they can put themselves toward a good cause and also that they get to spend a lot of time with each other. I have noticed that there are some really tight relationships in the volunteers. I think that would probably be the most*

*important thing. I mean, what they are doing is great but I think that the relationships that they have is even better.*

Joshua Trotter, TESC Intern  
6 days into TNC Internship

Volunteers repeatedly expressed that friendship was one of the main reasons they continued to dedicate their time. Numerous volunteers described each other as family or as the best of friends.

*It's very much a family and the more I become involved, the more I want to be involved.*

Don Guyot  
Glacial Heritage Preserve volunteer for 2 years

*I would say, as a whole, this group is almost like a family.*

Michelle Blanchard, volunteer and adjacent landowner  
Glacial Heritage Preserve volunteer for 12 years

*It's just a really fun group to work with. We have grown really close .... it's been real good for all of us I think, for all of the members and we have gotten really close and made really good friends this way – some of the best friends we have!*

Kathy Whitlock  
Glacial Heritage Preserve volunteer for 6 years

When asked to describe the greatest strengths of the group, interviewees repeatedly focused on the commitment and the inspiration they found in the other volunteers that they work with. In other words, one of the major forms of inspiration within this group was the personal qualities they found in each other.

*I think the dedication of the people (they have been doing this for a number of years) and the congeniality of this group (because there doesn't seem to be any noticeable dissension). People enjoy working together and go at the challenge to try and restore this prairie. It is a big experiment and a challenging experiment.*

Patricia G. Montague  
Glacial Heritage Preserve volunteer for 2 ½ years



The more they have given as individuals, the more they have been inspired to give as a group. Dedication has grown as they collectively have given as a cohesive group.

*Dedication! Everybody is here just about every week. Every once in a while somebody goes on vacation for a week or two, but mostly everybody is here and willing to work in any kind of weather – rain or shine! Dedication. And you know, you only need one person who knows what has to be done and a bunch of people to do it – it takes a lot of grunts to put together this whole thing. They only need one scientist to figure out what they need, but it takes a lot of people to do it.*

Michael Jarisch  
Glacial Heritage Preserve volunteer for 10 years

*The major strength of this volunteer group, I believe, is that there is a spirited core. There are a number of people, who have known each other for a while, and they are willing to come out and do this stuff. And they have done it for a lot longer than I have (I have only been here since 2004) and it's a friendly environment and, you know, they just keep going.*

Stephen J. Rutkowski  
Glacial Heritage Preserve volunteer for 5 years

*It is a dedicated group. They are out here almost every month. It's a core base group. There are a good dozen people that are out here every month. They have been here for a long time. It is amazing that they are mostly retirees. There are not many of us that are still working. They are definitely dedicated. They are definitely knowledgeable.*

William Funk  
Glacial Heritage Preserve volunteer for 12 years

### Shared Environmental Ethic

The second subgroup within the theme of Shared Values is Shared Environmental Ethic. Sixty-six percent of the participants said that they shared and valued similar environmental and social conditions. Shared environmental ethic is directly linked to sub-themes such as Social Cohesion, Ownership, and

Environmental Concern. The sharing of an environmentally focused land ethic creates a vision volunteers can collectively work towards as a cohesive group. Participants share what they believe the greatest strengths of the volunteer group to be.

*Well, I think social cohesion. I think a passion for nature from different perspectives ... a belief in being good stewards of our environment. And I think that's a commonality that folks have, which is always fun. It's a fun group and good people.*

Cliff Snyder

Glacial Heritage Preserve volunteer for 12 years

*I think, basically, their enthusiasm – commitment to doing the prairie restoration, to somehow make it come back to what it was, to have all of the flowers that used to be here, to have an open area – the birds and the butterflies and things – I suppose the desire-to-return-to-what-used-to-be syndrome – of wanting to see what the prairie used to look like when the settlers first came. But it is the enthusiasm of the group which is the strength of it. Nobody – none of us – are experts; none of us are professional botanists or ecologists or timber men or any of those. Everybody does their favorite thing ... more.*

Dan Montague

Glacial Heritage Preserve volunteer for 3 years

In short, although volunteers may approach ecological restoration from different perspectives they share similar environmental values that lead to group cohesion, friendship, motivation, and ultimately dedication. The following excerpt portrays a clear example of this idea.

Interviewer: What do you believe are the strengths of this volunteer group?

*Well, we all have the same goal.*

Interviewer: Which is?

*Which is the preservation of the land to get it back to the way it should be. And we don't have any dispute there. That's why this group of people work together so well. We know what our charter is, what our mission statement should be and we work toward it. And we work toward it as a group. We don't work toward it as individuals. We all have some part of it that's ours. We don't report to anyone in particular within the group that is, but we all have a common goal and we tend to put all of our activities in together even though we're separate people. I hope you understand what I am trying to say. It's been an eminently satisfying type of experience to work with people like this. They all have the same reason for being here. We all have the same passion and we all hope to have the same ending.*

Interviewer: Which is?

*Preservation, restoration, and a place for future generations to see the heritage that we are trying to make – what it's gonna be – and, right now, I think we are doing a pretty good job of that.*

Barry Bidwell

TNC volunteer for 23 years

This sub-theme is a significant motivational factor that has played a role in the volunteers' long-term dedication. This topic is further explored through the sub-themes categorized under Volunteer Motivations.

### Sense of Ownership

Sense of Ownership was expressed by 41% of the volunteers. Although this idea was not as prevalent as other sub-themes, it was included because of the concept's association with other sub-themes, as well as the striking testimony of multiple volunteers. Like the sub-theme Love of the Prairie Landscape, this sub-theme illustrated the strong sense of identification the volunteers felt with the local ecosystem they strived to restore. These feelings of love and identification

led to feelings of ownership. Part of the point of taking care of a place is also being with that place.

*It's ours – It belongs to us.*

Dan Montague  
Glacial Heritage Preserve volunteer for 3 years

*The volunteers are deep-rooted in this prairie and it seems to be like their project – taking ownership of it, which is really cool to see.*

Joshua Trotter, TESC Intern  
6 days into TNC Internship

Sense of Ownership intricately tied into several other sub-themes identified in the data. For instance, the following excerpt illustrates two of the reasons the participant has chosen to volunteer: Sense of Ownership and Environmental Ethic. In this passage, Bidwell expressed what she believed the greatest strength of the South Sound Prairie Volunteer Group to be.

*Probably wanting to preserve – wanting to preserve the place and take ownership of the different sites; 'cause you do when you work 'em, you just feel like you have ownership in that prairie. It just makes you feel good to know that you can do something that you know is going to be there forever. If you have people that keep doing it, you know, volunteers that keep coming out (and I am sure that that will always be the case, because there's lotta folks, especially nowadays, that want to see the prairies and things preserved), but it takes volunteers, it just can't be done without 'em. And then when you see the changes, it just, it makes you kind of an owner – owner of the, you know, of the property. And that's what we feel, I know, at Glacial, here, because since we have been here from the beginning – that is, we've seen such a change. And there [aren't] many prairies available any more – so we just feel that it's for our kids, and grandkids you know – they have a place to go and see the prairies as they were or should be.*

Darlene Bidwell  
TNC volunteer for 14 years

This excerpt showed how ownership can develop through knowing that you are making a difference, through taking direct responsibility for the changes that one has seen occur, and through identification with and love of the land. In the next excerpt, the participant expressed how ownership is developed through increased volunteer responsibility over restoration activities that take place. A similar idea was previously explored under the sub-topic Knowledge and Education.

*Of this group, the greatest strengths, I think the organization; and also that the volunteers are so much involved in organizing and leadership. It's not that the volunteers are being told what to do, by some governmental authority that's ever-changing, but that the volunteers are involved in organizing and decision-making. And so, I think that it creates ownership in the group. And we all have a lot of respect for each other and a lot of respect for the leadership of the volunteers, but also respect for the leadership of The Nature Conservancy.*

Cherlene Pedrick  
Glacial Heritage Preserve volunteer for 1 year

### Love of the Prairie Landscape

Throughout the interviews, volunteers repeatedly stressed feelings of deep appreciation for the prairie landscape and for the Glacial Heritage Preserve. Fifty-two percent of the participants focused on this concept. Similar to Sense of Ownership, Love of the Prairie Landscape portrays the volunteer's deep reverence for the local ecosystem they strived to restore. Moreover, this sub-topic is directly interwoven into the one above. Love of an area is one of the factors that led to feelings of ownership and a sense of responsibility.

*The greatest strength is, hmm, we are all out here individually and for our own reasons, but we all are out here for the same purpose. We all seem to love the prairie... but I think the main magnet and the main attraction is this prairie. We all love it for different reasons, but we all love it.*

Michelle Blanchard, volunteer and adjacent landowner  
Glacial Heritage Preserve volunteer for 12 years

*I could think of many, many reasons of why this is a good experience for us. For one thing, Tosh loves flowers and it's something that I observed when he was real little. We used to go for walks and I taught him about the wildflowers – the names of various ones – until I didn't have enough knowledge to go much further. And this turned out to be perfect for that, and we discovered that we actually were living on five acres of prairie land and oak grove and we didn't know it. We didn't really know what a prairie was and we found out that all of those flowers that were coming up on our prairie land were special and unique habitat. And so I really love that Tosh has been able to expand his knowledge and pursue his love of flowers immensely by coming out here and doing this work.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

Through their work, volunteers are able to aid in the restoration of the native flora and fauna. The following passage illustrates the identification numerous individuals feel with the local ecosystem. In this passage, the volunteer is describing why local residents care about restoration of local flora.

Interviewer: I have talked to a lot of people who are really excited about the native plant nursery. Is this nursery a unique thing, the nursery and the program?

*Well, I think it's just something that so many people can get involved with. And the native plants are cool and prairies are kind of – they are like their own little special thing down here. There's not very much of them left, because all of the trees have grown in, you know, and the same people that volunteer (like all the Tuesday folks) a lot of them volunteer with Native Plant Salvage also. I think it's just people get excited about native plants.*

Angela Kubalek, TESC Intern  
TNC volunteer for 4 months

## Satisfaction with The Nature Conservancy

Satisfaction with The Nature Conservancy is the final sub-theme within the Shared Values category. This sub-theme differs from the others. The other sub-themes described above are focused on the volunteer's personal feelings, impressions of the work they accomplish and the group they accomplish the work with. This sub-theme is focused on the volunteer's feelings toward the NGO they volunteer through. Inquiry into a volunteer's satisfaction with TNC was not a standard question. Volunteers expressed satisfaction with TNC on their own initiative. (It should be noted that not all of the participants discussed TNC; therefore, one cannot infer how all of the participants feel about the organization.) Forty-five percent of the participants expressed satisfaction with volunteering for TNC.

*Well, we believe in what The Nature Conservancy is doing, so it's always nice to be able to do something for them.*

Douglas F. Ryan  
First time volunteer

Although some individuals said that the overseeing organization did not influence their decision to participate, others stated they had chosen to volunteer with the South Sound Prairie Volunteer Group explicitly because of its association with TNC.

*I have a general interest in just about anything the Conservancy is involved with. I have specific interest in this because I have a lot of ownership here now. I have been involved with it for 23 years.*

Barry Bidwell  
TNC volunteer for 23 years

*I think this is one of the better groups that I have volunteered with in terms of volunteer management, in just being clear with their volunteers about what they are going to do and how they are going to do it and when they are going to do it. Whereas, other groups I have volunteered with, you go out and they end up having you doing something completely different from what they said or I have gone out to volunteer and there is nobody there and there are no signs, nothing indicating it was canceled. You have no idea what is going on. So, I like that this group is consistent and you know what is going on and they know how to treat their volunteers well.*

Angela Cahill

Glacial Heritage Preserve volunteer for 14 months

As stated, gaining widespread public support is significant for environmental organizations because it further enables them to meet their organization's mission.

*The property is only the first thing. Then you have got to do something with it.*

Don Guyot

Glacial Heritage Preserve volunteer for 2 years

Public awareness of environmental issues could help alleviate conservation problems today, before they become the problems of the future. Moreover, several volunteers stated that they supported TNC's mission and conservation tactics in regard to land preservation. In describing why he joined TNC, one volunteer stated:

*Because I like their tactics in regards to land preservation. At the time [when Bidwell joined], they were not a political group at all. They were just out, quietly buying the land and preserving the land and restoring the land as required. Of course, as we know today, TNC is the largest conservation group in the world and I just decided to stay with 'em because their basic mission hasn't changed – just they have to get involved now with other parties, such as the government, and I understand that and I am still*



*basically dealing with the mission they originally had. It hasn't changed.*

Barry Bidwell  
TNC volunteer for 23 years

The following excerpt describes why one volunteer had chosen to volunteer with TNC. The participant states that he supported TNC's non-confrontational conservation tactics, similar to the above excerpt. It is significant to note the various reasons why individuals have chosen to participate. In addition to Satisfaction with TNC, the sub-themes of Social Cohesion and Enjoyment of Restoration Work are evident.

*The Nature Conservancy, I really believe, is trying to solve problems rather than be confrontational. ... The Nature Conservancy takes a different approach [from other environmental organizations], which I think is also great. It tries to work with anybody who is willing to do anything for the environment, including businesses, corporations, and anybody else who is willing to cooperate, and I think that is also important. So, the Nature Conservancy is really high on my list, on my list of groups. We support some gay groups, we support some political groups and we support a lot of environmental groups and have 'em in our wills, so it is just important to me to be part of The Nature Conservancy and do what I can for The Nature Conservancy. This is something I can physically do.*

*You can write letters and you can send e-mails. You can contribute money, but I think it's also important to contribute your labor and do something with your hands and plant trees or pull weeds or whatever it is. I just think it is important. And The Nature Conservancy provides that opportunity. ... I could probably volunteer with a lot of groups, but this one has always been convenient. I like the people. This is a great group of people to work with. There are a lot of people who have been coming here a lot longer than I have, since the very beginning. You get people who were out here when this stuff was eight to ten feet high all over this place, and it's nice to work with these people. They know a lot. They're fun. They're cooperative. They feel the same way I do. It's kind of – oh it's kind of a family in a way.*

James L. Boone  
Glacial Heritage Preserve volunteer for 9 years

## **Volunteer Motivations**

Volunteer motivations are the final theme to be examined. Two sub-topics for this theme were identified: Environmental Concern, and Ability to Make a Difference. These two sub-themes are directly related to the themes Volunteer Experiences and Shared Values. Moreover, it is the combination of experiences and enacted values that lead to motivation and ultimately to long-term dedication. Through the experience of ecological restoration work, individuals are able to proactively address their environmental concerns and feel that they are making a difference. As stated, increased understanding of the motivations of volunteers could strengthen program managers' abilities to retain individuals over a long period of time and could ultimately benefit future volunteer programs.

### Environmental Concern

Seventy-six percent of the South Sound Prairie Volunteer Group focused upon their environmental concerns and expressed that this was one of the reasons they had chosen to volunteer. Environmental concerns ranged from local to global issues. Local concerns included regional conservation concerns, native plant restoration, invasion of noxious species, and reestablishment of local fauna, such as bluebirds or butterflies. Global concerns touched on topics such as global climate change, international conservation concerns, and societal recognition of environmental issues. Namely, volunteers were motivated by the desire to make the world a better place.

*I think you always hope that you can make things better and certainly we need to keep trying to preserve our native plants in whatever area we can.*

Patricia G. Montague  
Glacial Heritage Preserve volunteer for 2 ½ years

The following excerpts portray volunteers who expressed that locally focused concerns influenced their decisions to dedicate their time.

*Once we learned about how prairies in Washington State are decreasing, ... we just really saw the importance of preserving our prairies. And we just really enjoyed it – enjoyed the camaraderie – and just felt that we were doing a major part in prairie preservation and environmentally sound work.*

Cherlene Pedrick  
Glacial Heritage Preserve volunteer for 1 year

*There is so much more of the prairie now that looks good and, of course, TNC keeps upping the efforts they're putting in to it – the spraying programs and all that weren't happening five years ago. They are really making a difference.*

David Hepp  
Glacial Heritage Preserve volunteer for 5 years

In addition to locally focused environmental concerns, volunteers expressed concern for the general state of the planet. Ability to address local concerns enables individuals to contribute to the big picture in some small way.

*I have always been a gardener and I have recently become very concerned about the state of the planet and what responsibility mankind has had getting the planet in that state and I decided that I wanted to try to do something to reverse that in a small way.*

Don Guyot  
Glacial Heritage Preserve volunteer for 2 years

*I just would like to hope that, that as people come more and more, [they] realize how vital it is to save the little pieces of the planet that are left, that they'll cooperate and they'll help. But I think it is probably more important that they just understand, overall, everybody needs to do what they can to help save the planet.*

James L. Boone  
Glacial Heritage Preserve volunteer for 9 years

### Ability to Make a Difference

This sub-theme is directly tied to the one above. The two sub-themes have been divided into two separate categories to make a very explicit point. It is not enough for volunteers to simply care about environmental issues. They need to be able to proactively address their concerns. Moreover, 79% of the volunteers expressed that the ability to make a difference influenced their decision to continuously volunteer. Ecological restoration volunteer work empowers individuals by enabling them to make a positive difference. The following passage provides a powerful example of this idea.

*Well, I didn't know much about The Nature Conservancy until we started this work and now I've read a few books about it ... and I think it's just an amazing, phenomenal organization. I'm really impressed with what they are doing worldwide and for this country. I think it's awesome and, you know, it's really great that it's nongovernment. You know, it's neat to see how it works and how they can do things. The people I have been around from The Nature Conservancy, they – at first I was struck by a different attitude than what I thought I'd find, like they're out here on the prairies and they were doing things, planting things or doing things. And I realized that they did have the attitudes like, we really don't know how to do this restoration work, but we're going about the business of figuring it out and we're starting now and were gonna learn. And we're gonna do it and this is forever. And that's pretty exciting. That's pretty neat for me to see that. I really love the whole thing, the whole concept of it.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

Through localized restoration work, individuals are able to be a proactive part of making a tangible change that continuously expands overtime. Ecological restoration work enables participants to be a part of a striking change they can see on both a daily and annual basis.

*People need to be able to help – feel like you are doing something worthwhile.*

Beverly Heebner  
Glacial Heritage Preserve volunteer for 5 years

*I like getting out in the open. I like the people. I like contributing something to the future – try and replay some of the damage we have done to the planet.*

Dennis Plank, TNC 2008 Volunteer of the Year (TNCWA 2008d)  
Glacial Heritage Preserve volunteer for 10 years

This sub-theme is also intricately linked to the sub-theme, Experience of Change. Being a part of a proactive restoration program has played a large part in creating long-term dedication within the volunteers.

*I like what we are doing and can definitely see the difference we have made. Like you say, it used to be old-growth – where some of the stems, trunks, were three inches, four inches, ‘round – and we used to go at ‘em with saw blades, and now we can actually use little weed pullers. You can definitely see the difference in the flowers and the life on the prairie. So, giving back a little bit.*

William Funk  
Glacial Heritage Preserve volunteer for 12 years

*The most rewarding part is knowing that I have contributed to the continuation and improvement of the environment. Today was a particular highpoint because, for the first time this season, I actually saw bluebirds; and not only saw bluebirds, but more than one pair. We had rearranged the birdhouses and placed them so that they are in a much better environment than they were last year, and I was one of the people that was pleading to change this, and as a result of looking up various research, the organization decided to go along with this idea, and we set the boxes up, and today I felt vindicated because not only have I seen a bluebird, but more than one pair, which means that it seems to be going successfully.*

Stephen J. Rutkowski, Western Bluebird Monitoring  
Glacial Heritage Preserve volunteer for 5 years

Furthermore, newer volunteers are inspired by the accomplishments of the past, realizing the difference they too can make. The following passage illustrates one volunteer's firsthand impression of the South Sound Prairie Volunteer Group.

*Well, you know, people's friendliness, their enthusiasm for what they are doing, dedication to – well, obviously, people have been persistent in something like Scotch broom. It's not easy to conquer and people, you know, seem to feel like they have been making progress, which is, is nice to hear.*

Malen Ryan  
First time volunteer

The final passages portray how two interns experienced the phenomenon of being a part of a continuing process, a process that will continue long after their TNC internship commitments end.

*I've really gotten a better understanding of the whole restoration process. It's extremely complicated and I hadn't realized before how long things take and how much is involved – how many people are required, how really – how long it takes to do something on a large scale like this – restore the prairie. There's so much to do and it will take years to do it all. That's really, that sort of, that perspective of you're not going to complete your project, but you will be working towards something – I've really, I've gained that understanding and that's okay. We'll work on these short term goals and we'll, in the end, help out that long term goal.*

Colleen O' Shea, AmeriCorps Intern  
TNC volunteer for 7 months

*I believe the strengths [of this group] are a sense of community and I think that it's really strong in that, like, all the people who come out and volunteer seem to be like friends. ... but I think it's a sense of community and a sense of accomplishment, because, like, so many of the volunteers have been there so long, and even, like, myself included. I chose to come back because I wanted to, like, keep seeing the progression, like, throughout the year and I think you can really see that on the prairie and they all, like, have been there for so many years, so I think, like, they can see how, like, what their efforts have produced year after year and seeing it really come along.*

Angela Kubalek, TESC Intern  
TNC volunteer for 4 months

## **Lessons Learned – Strengthening Ecological Restoration Programs**

This thesis has focused on volunteer motivations, values, and experiences and how the combination of these factors can lead to long-term volunteer dedication. The final portion of this chapter will discuss methods by which land managers and volunteer program coordinators could strengthen their ecological restoration volunteer programs. This section will incorporate the prevalent concerns expressed by the South Sound Prairie Volunteer Group. It is my hope that, through my analysis and through the participant's testimonies, this thesis will assist future programs in accomplishing ecological restoration goals.

South Sound prairie volunteers approached program improvement from various angles. Some expressed the desire for increased responsibility, while others were content with the role that they held. One volunteer made a valid point when he expressed that there is a fine line between sought-after responsibility and too great a dependence on the volunteers (Montague 2008). Despite their dedication, this is still volunteer work, not a full-time job. The following views portray the varying attitudes participants have toward their work.

Numerous South Sound prairie volunteers expressed a desire for on-going education, training, and ecological knowledge. Some stated that they would like to simply learn more about the local ecosystem while they conducted their normal restoration duties, while other participants expressed the desire to continuously develop as ecological restorationists. Throughout the year, TNC provides regular trainings on the identification of flora and fauna for staff and volunteers. Volunteers expressed an appreciation for this; however, those who had taken on

ecological monitoring projects expressed the need for increased contact with local professional experts. Other volunteers stated that they were content to concentrate on physical activities such as noxious species removal.

The varying preferences of volunteers indicates that ecological programs could benefit by offering multiple tasks to be accomplished on volunteer days. However, no matter the restoration activity that volunteers favored, they overwhelmingly appreciated being reminded to look around and enjoy the prairie.

These results indicate that TNC volunteer programs may benefit by providing increased optional trainings on volunteer days. Some of these trainings, such as identification of local flora and fauna or local history, could even be taught by knowledgeable volunteers. These trainings would not have to be long (they could only be a few minutes) but regular, short identification lessons would enable newer volunteers to get to know the prairie in ways that long-term volunteers do. At the same time, more advanced trainings could be provided to budding ecologists who seek to take on monitoring roles, and to long-term volunteers who seek additional guidance for a specific project. This may increase the effectiveness and follow-through of the monitoring currently taking place on the prairie.

Volunteers repeatedly stressed the significance of friendship and social cohesion with their group. Participants expressed how much they enjoyed social activities associated with volunteer work and how they desired future social opportunities. Examples of social activities outside of regular workdays include holiday parties, summer picnics and weekend trips to conduct restoration on other



preserves within the region. Social events are organized by TNC staff and by the volunteers themselves. Examples of social events during the workday include the daily lunch-hour break, where volunteers share cookies, tea and stories. It is not uncommon for volunteers and staff to explore and examine local curiosities or scenic viewpoints at this time.

The results of this data have overwhelmingly indicated that volunteer programs benefit through providing social opportunities that foster friendship and social connection. Therefore, it can be inferred that continual social opportunities will benefit this volunteer program and could have the same effect on similar volunteer initiatives. Social opportunities that involve TNC staff also give volunteers the chance to connect with professionals in the environmental field. Volunteers indicated that these events made them feel that their work was acknowledged. In addition, social opportunities may provide new volunteers the chance to develop social ties that may encourage long-term dedication.

Similar to the idea of social cohesion within the volunteer group, volunteers remarked on the significance of establishing and maintaining meaningful relationships with TNC staff. Moreover, TNC ecological restoration efforts and their ability to maintain a viable volunteer program may benefit through the presence of long-term professional staff that have regular interaction with the volunteers.

Consequently, desire for improved communication with the management was another prevalent improvement suggestion. Participants expressed the desire to have a clear understanding of why particular restoration actions were

happening. For example, volunteers did not question why Scotch broom was being pulled, but there was some confusion about why it was being pulled in certain areas and not others. Volunteers expressed the desire for slow, work-intense activities, such as noxious species removal or seed collection, to be as effective as possible. They enjoy the activity associated with these tasks, but want to make sure that these efforts will benefit the preserve as much as possible. Plant propagation is another viable example. Volunteers expressed the desire to have a clear idea of which seeds TNC staff wanted gathered, sorted and replanted on the prairie. They expressed the desire to follow through on the whole activity. Moreover, analysis of this qualitative data has indicated that providing the volunteers with a clear understanding of the long-term restoration plan encourages them to look to the future, establishes a guideline for volunteer restoration activities, and clears up possible misunderstandings.

Finally, the need for more volunteers was one of the main concerns volunteers shared. Volunteers expressed the desire for this restoration work to continue far into the future. They supported TNC's expanding recruitment efforts with local educational institutions, interest groups, and internship sponsors. Numerous volunteers even advocated for more. One volunteer suggested that prairie management could benefit from increased outreach to the neighboring community of Littlerock, beginning with a focus on the school system (Engelstad 2008). Others stated that increased awareness and knowledge of prairie restoration efforts by the neighboring communities would be beneficial. It should be noted that many of the outreach suggestions provided by the volunteers match

the very efforts that the TNC staff are conducting. Moreover, communication could be improved by sharing new outreach efforts with current volunteers.

## **Discussion**

In conclusion, the qualitative data in this thesis clearly show that volunteers are motivated by factors such as environmental concern, socialization, personal developmental activities, and identification with their local natural environment. These concepts were organized into three themes, Volunteer Experiences, Shared Values, and Volunteer Motivations, to illustrate how the combination of these qualities leads to long-term volunteer dedication, and increased ecological restoration. Through analysis of semi-structured interviews, this research has provided insight into the personal characteristics of twenty-nine ecological restoration volunteers. This qualitative data has demonstrated that long-term ecological restoration volunteers tend to have the personal qualities that influence them to engage in ecological restoration work. At the same time, these characteristics are developed through participation in these activities. Land managers can enhance their environmental programs through awareness and fostering of these qualities.

## **Chapter 5 – Conclusion: From Local to Beyond**

*I see the TNC having two levels. One is the **national level**. Those are the Internet website, it's the brochures, it's the fundraising, it's the acquiring of properties, and all of that – which I think is really helpful and necessary and I am glad to support them financially. But in addition to that, sort of the national/international aspect of TNC, **then it gets down to one prairie, one reserve, and who the people are that are going to help to improve it and keep it running the way it should be, and I think that we are just lucky in this state and this area that we have got a good group of real **hard core volunteers** that wanna come out Tuesdays and Saturdays and spend their time. **It's due to some of those volunteers that we get as much accomplished as possible.*****

John Crawford  
Glacial Heritage Preserve volunteer for 5 years  
(Emphasis added)

Over the past twelve years, the South Sound Prairie Volunteer Group has accomplished an extraordinary amount of restoration work for TNC, Thurston County, and the State of Washington. Much of this restoration work would not have been accomplished without the dedication of local volunteers. Through their efforts, volunteers have helped transform a preserve that was overrun with non-native, invasive species back to a recovering state of ecological health and beauty. This thesis has explored the inspiration behind these individual's dedication and how localized grassroots efforts relate to the widespread environmental movement.

In closing, the final chapter will offer a discussion of the previous chapters. This chapter will begin with a unified elaboration of the concepts that have been presented throughout this thesis. Second, I will review why an understanding of volunteer motivations, values and experiences is significant.

Next, I will present how my research findings compare to previous studies. In conclusion, I will review the final analysis of this research.

Through detailed analysis of an elaborated case study, I have explored how a localized grassroots movement has aided in the restoration accomplishments of a professional environmental organization. Moreover, I contend that volunteer dedication develops through the combined phenomena of volunteer experiences, values and motivations. Increased understanding of these concepts can assist professionals in the environmental field improve and expand restoration efforts. Public involvement in local ecological restoration efforts provides avenues for NGOs to increase public awareness and support for their environmental missions.

The value of lessons derived from a single case study was another premise presented in this thesis. The South Sound Prairie Volunteer Group is an integral part of TNC's future management agenda for the Glacial Heritage Preserve. The preserve has been highlighted by TNC as a focal site for public education and participation (TNCWA 2008a). South Sound prairie volunteers have been a major part of the extensive ecological transformation that has occurred on the Glacial Heritage Preserve and some of the volunteers have been a part of local ecological restoration on the preserve for timeframes stretching up to twelve years. The combinations of these factors make this population a prime group from which to draw valuable lessons.

Careful analysis of twenty-nine semi-structured interviews revealed ten prevalent concepts, which conveyed why volunteers had chosen to dedicate their time to local ecological restoration efforts. The ten concepts were then organized

into three main themes: Volunteer Experiences, Shared Values, and Volunteer Motivations. As presented in chapter 4, this research has illustrated that there is a cause-effect relationship between characteristics displayed by the participants and the phenomenon of long-term volunteer dedication. Awareness of these characteristics enables program coordinators and land managers to provide opportunities that foster such qualities. At the same time, strengthening of these ethics is an effective method of public outreach and program expansion.

My own research closely coincides with the findings of numerous major studies. As stated, this research was conducted as a case study. This is a conventional research method that has been repeatedly employed by past researchers. My analysis has provided methods in which ecological restoration volunteer programs can be strengthened through the fostering of empowering experiences for volunteers. The following section will discuss how my findings are supported by recent research. Literature will first be discussed in a three-theme manner, which aligns with the structure of my results. Second, I will present research that did not coincide with my own findings.

Volunteer Experiences is the first of the themes to be discussed. Analysis of these results leads one to conclude that an individual's restoration experience influences that person's decision to dedicate time and energy. To begin with, volunteers expressed a strong attachment to the Glacial Heritage Preserve and to the disappearing prairie environments of the South Sound Region in general. For the South Sound Prairie Volunteer Group, this concern has been turned into proactive restoration efforts. Similar analysis has been presented by Ryan (2000),

Ryan et al. (2001) and Forbs et al. (2008). These authors suggest that frequent visitation of an area can create a conceptual attachment to place, thus increasing a participant's desire to restore and protect both the area of visitation and natural areas with similar ecological environments. Grese et al. (2000) support the concept that ecological restoration volunteering creates identification with a particular landscape.

Education and Knowledge was another of the sub-themes explored under the theme of Volunteer Experiences. Similar to Donald (1997), Ryan et al. (2001) and Westphal (1993), my research suggests that volunteers value educational opportunities and that volunteering increases participants' knowledge of environmental problems. Byron et al. (2002) state that program managers need to continuously engage, educate and recruit volunteers in order to maintain viable programs. Although addressed from a different angle, my own research supports these ideas. Long-term volunteers are more apt to participate in advanced restoration work that requires training and localized knowledge. Furthermore, my findings support the premise that education, training, and specialized duties are a powerful key to creating long-term participant engagement.

The second theme to be discussed is Shared Values. The sub-theme of social cohesion was the dominant idea expressed by the South Sound Prairie Volunteer Group. My research led me to conclude that social incentives play a major role in volunteer motivation and dedication. This analysis is supported by Aull (2004), Grese et al. (2000) and Schroeder (2000). The research presented by

Grese et al. (2000) and Hastings (2006) supports the idea that volunteering provides numerous social benefits.

Satisfaction with TNC was another sub-theme to be examined under the theme of Shared Values. This sub-theme addressed the volunteer's attitude toward the NGO managing the volunteer program. The significance of this concept is supported by the research of Donald (1997) and Geist et al. (1999). Donald (1997) suggests that program organization holds an influential role in how active a participant becomes. Geist et al. (1999) stress that ecological restoration work is often at the mercy of volunteer programs; therefore, shifts in social values or dissatisfaction with the program's organization could result in loss of volunteer hours and, thus, in the amount of ecological restoration work accomplished. However, on the other side, satisfaction – such as the overwhelming sentiment of the South Sound Prairie Volunteer Group – could lead to increased volunteer efforts and long-term dedication.

Shared Environmental Ethics is another sub-theme that was examined under the theme of Shared Values. The importance of this concept is supported by Geist et al. (1999). Geist et al. (1999) stress that restoration initiatives need to meet both ecological and social needs. My own research supports this idea. The theme of Shared Values concentrates on the influential significance that personal ethics and social values have upon volunteer programs.

The analysis presented under the theme of Volunteer Motivations is supported by numerous authors. Two sub-themes were presented under this topic, i.e., Environmental Concern and Ability to Make a Difference. From this



analysis, I have concluded that volunteers' desire to dedicate their energy is directly influenced by their ability to address their environmental concerns and to make a tangible difference. These results strongly coincide with findings of Schroeder (2000) and Grese et al. (2000). Schroeder (2000) concluded that three interrelated factors had led to long-term volunteer dedication: volunteers had feelings of great urgency in relation to loss of biodiversity; they believed they could make a worthwhile difference; and they were able to see the positive difference their efforts were making. Grese et al. (2000) conclude that volunteering enables individuals to feel they are making a difference. My own research consists of complementary results.

In a few cases, my research focus differed from those of the discussed studies findings and although analyzed from a different angle, my results consistently presented the flipside of what these researchers found. For example, Geist et al. (1999) and Byron et al. (2002) focused on inefficient use of ecological restoration volunteers, while my research focused on efficient use. These authors stated that volunteer disengagement or sway of public opinion could have a negative effect on restoration efforts, while my data indicated that empowering programs can engage people long-term and have a positive influence on social values. Geist et al. (1999) also focused on the obstacles that may arise when project coordinators attempt to meet both ecological and social needs. My qualitative data, on the other hand, indicated that an organization's mission and volunteer visions can successfully align. Miles et al. (2000) acknowledged that volunteer efforts may be tempered by participant frustrations, while my results

indicated that volunteer satisfaction and clear communication can reduce participation frustrations and may increase program effectiveness.

## **Final Discussion**

Ecological restoration is a unified social attempt to return landscapes and natural processes to a state of healing and balance. Likewise, ecological restoration volunteerism creates an avenue for advocates to address their environmental concerns. Making a tangible difference in one's local environment is inspiring and empowering. This thesis has attempted to vividly illustrate these sentiments through portrayal of the South Sound Prairie Volunteer Group. Over the last 12 years, the restoration efforts of these volunteers have played a major role in transforming local prairie habitat, such as the Glacial Heritage Preserve, to a state of improving health and natural diversity.

Additionally, this thesis has contended that ecological restoration volunteer programs can benefit through increased understanding of volunteer values, experiences and motivations. The fostering of such qualities has the potential to dramatically increase the amount of invaluable work that volunteers accomplish, while embodying an ecologically supportive land ethic that recognizes the value of ecological balance and biodiversity. Therefore, environmental programs can benefit through fostering an experience that empowers volunteers to address their environmental concerns, acknowledging their efforts, and finally through providing participants with proactive activities that enable them to see and understand the difference they are making.

Ecological restoration is an on-going process that requires the long-term support and dedication of local communities. Such efforts are about restoring the health and vitality of the land, but also about reconnecting with the region. Restoration is about embracing the role of caretaker in a particular place, while honoring the human/nature relationships of the past. It is an attempt to reconnect local communities with their natural environments through the efforts of making nature whole. This thesis has shared the stories and wisdom of extraordinary individuals who are making a difference. It is my hope that the lessons learned from this volunteer group can be applied to other regions, to enable future visions to become healthy environmental realities.

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## **Appendix I. Interview Questions**

1. Could you please state your name, age, race, profession and current residence?
2. How far do you travel (average mileage) to volunteer at the Glacial Heritage Preserve?
3. How many hours do you volunteer per week/month?
4. Are you a member of The Nature Conservancy and/or Friends of Puget Prairies?
5. How long have you volunteered with the South Sound Prairie Volunteer Group?
6. Why did you choose to volunteer with this group in particular?
7. What sort of changes have you observed?
8. What sort of duties do you perform or specialize in?
9. What do you believe are the strengths of the South Sound prairie volunteer program?
10. How do you believe the program could be strengthened?

## Appendix II. Interview Testimony

The following testimonies were extracted from the semi-structured interview transcripts. They are provided to give the reader an extended portrayal of the volunteer narratives.

*It seems like people want to contribute, but they contribute in different ways [donating and volunteering]. But, it does seem like it takes both to be successful. Cause all the people who are working [for TNC] won't be able to get paid to coordinate all the [volunteer] days without the donors. ...Then again they [TNC] wouldn't be able to do the kind of work that they do without the volunteers.*

Angela Kubalek, TESC Intern  
TNC Volunteer for 4 months

*I think at the beginning we liked the work just for the work, but then found that in this particular group you have a core, a central core, of real good volunteers and those people, probably just resonated with us well and we enjoyed being with them and interacting. ... For us it fills a need and we just really enjoy it. Plus it looks like here at this particular prairie there's – TNC I think has good management. It's good to see what the long range plan is. It's good to work with the TNC professionals and the employees and staff there. And Carrie and her predecessors and co-workers have all just been very good people to work with.*

John Crawford  
Glacial Heritage Preserve volunteer for 5 years

*I feel that it has all together a level of commitment that I haven't found in most other volunteer groups with which I have been associated – either as a planter, gardener, composter, or any other herb relation of a volunteer group.*

Don Guyot  
Glacial Heritage Preserve volunteer for 2 years

*I don't know. I guess, I don't just deal with a lot of older individuals and I guess it's just an appreciation of learning about other people's lives. Ya know, I don't really – like a lot of the older individuals I have known in my life, I haven't taken a whole lot of time to understand the entirety of their existence, and so it's been interesting for me to – as I get to know the volunteers better to just ask 'em – What did you do? What were the 70s like? – You know, just like basic life questions. I think those are some of the most interesting things I have learned, I guess. So interesting, important – the same thing for me.*

Peder Engelstad, AmeriCorps Volunteer  
TNC Volunteer for 9 months

*I learned through being a participant in the programs and reading the material that came to me, as a consequence of our membership to the Conservancy, that the organization was profoundly affecting the environment positively and I am very much involved with that. I think about it a great deal. I try to do things that are in a small way beneficial to the environment and since the Conservancy does that, it was a fit for me. And when I found time for the commitment, it wasn't very hard to find this. I just got on the computer and found out about the volunteer opportunities and learned that there was propagation activity, which is one of my interests.*

Don Guyot  
Glacial Heritage Preserve volunteer for 2 years

*I like bees, you know, I keep honey bees and I study pollinators and it's given me a place to express some of that part of my hobby. And we have the Pollinators of the Prairies at Prairie Appreciation Day and I get a lot of joy out of doing that. I could probably go on and on and on. I really like this. I love this experience and it's been really – I can't say enough – how it's been perfect for us. At the time we found this, I felt like I was putting it out there mentally to the universe that I needed something, you know, because two things I wanted, a volunteer thing that was environmental, cause I care about the environment and Tosh loves the outdoors, but also I was kind of at the limit of my knowledge of plants. It wasn't very much and I wanted to be able to give him more of that and this just answered the call of that perfectly for us and of course I love the summer when we go collect seeds too. That's the fun times. For Tosh, when he was younger, three years ago, you know, it was really like being on a treasure hunt. He's really good at finding seeds. I mean, when we go out and there aren't many and nobody's finding any. He'll find 'em!*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

*Well, I have done a lot of volunteering in other places for The Nature Conservancy, so I am not a specialist by any means. It has all been field work. I don't care for volunteering in the office or anything, so I have done volunteering down here pulling broom, planting, propagating, collecting seed and I have volunteered at most of the major TNC sites in the state.*

Dennis Plank, TNC 2008 Volunteer of the Year (TNC 2008d)  
Glacial Heritage Preserve volunteer for 10 years

*I like the seed gathering and the planting part. ... and I do a lot of the inside work, the artistic work, making the cards. I am Treasurer for the organization [FOPP] so I take care of their finances and stuff like that – help with the grant application and that sort of thing.*

Kathy Whitlock  
Glacial Heritage Preserve volunteer for 6 years

*I think that there is a lot of knowledge, you know. Different people know about different things and some people know about one thing and some other things and there is a lot of knowledge in the group also.*

Tosh Hickmann, Homeschooled  
Glacial Heritage Preserve volunteer for 4 years

*There is just a whole lot of knowledge spread among the group. ... The other thing is they're willing to do just about anything. ... There's a lot of strength in having the attitude – we'll just roll up our sleeves and get it done and we'll have fun – whatever it is, you know. ...there's a lot of strength in that too.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

*I don't have any goals except pulling a lot of broom! And that's going really well, but then there are other things coming in, so our next generation will be pulling other kinds of weeds – other kinds of invasives. So, we have done very well – more than I expected to see. When I first came out here, I think it was a fifteen year plan to get rid of all of the broom, and I thought – oh you got to be kidding. It's been ten years and its getting almost there. The broom is not absolutely gone, but it sure does look like a prairie again.*

Michael Jarisch  
Glacial Heritage Preserve volunteer for 10 years

*Well, they work together really well. We have a lot of fun. Everybody learns what needs to be learned and does what has to be done and somehow it all works. And it's a good bunch to work with.*

Beverly Heebner  
Glacial Heritage Preserve volunteer for 5 years

*I really like that Tosh has these people as role models. I think that they are positive role models for him. These people find joy in giving time. The other thing I like about this a lot is that it demonstrates things that I have talked to Tosh about – oh you know – like we come out here every week and we don't just come when we feel like it. We come when we don't feel like it too. We get in the car and we go. I think that's good learning for him to, you know, see what its like to be committed to something and do it. So educationally, I think this is a really rich experience and for myself, personally, it's been a good cause too. ...I love this experience and it's been – really – I can't say enough – how it's been perfect for us.*

Brad Gill, Homeschooling Father  
Glacial Heritage Preserve volunteer for 4 years

*'Cause, you know, when you leave work, after working somewhere a long time, you kind of lose touch, a lot of time, with the people you worked with. These are like our best friends now!*

Kathy Whitlock  
Glacial Heritage Preserve volunteer for 6 years

Interviewer: I know you started growing some of the plants before Shotwell's Nursery was around. Could you tell me a little bit about that?

*Originally, we started with some tables in our back yard and there were about six tables and we were growing various plants of some kind. And Pat Dunn came up and he saw it and asked if we could grow some for down here [Thurston County]. And then they gave us some money to buy some lumber and put together some tables to grow plants down here [at Glacial Heritage Preserve]. We had maybe twelve, sixteen tables and we started growing all kinds of plants. Every once in a while when we had no more room, we'd build another table and then when they [TNC] bought Shotwell's they decided it was a good place to have it. ....So we moved all of our tables over to Shotwell's and that place has gone crazy, now it's a huge nursery. That was it. We still have our own nursery at home, but it's just a little one!*

Michael Jarisch  
Glacial Heritage Preserve volunteer for 10 years

*The lack of broom! Oh, and the group has come together an awful lot in the last ten years and it was more or less accidental.*

Dennis Plank, TNC 2008 Volunteer of the Year (TNC 2008d)  
Glacial Heritage Preserve volunteer for 10 years

*Physical changes – the amount of Scotch broom has been reduced dramatically.*

Dan Montague  
Glacial Heritage Preserve volunteer for 3 years

*The prairie is looking better than it did five years ago. There is less broom. There seems to be a more caring attitude than there used to be – lot more sensitivity to tearing things up and not tearing things up to preserving things. You see the loggers are even getting apologetic about their clear cuts.*

Interviewer: Do you think that the public attitudes of prairies have changed or do you think that they are widely known about?

*It's hard to say. I am so close to it. Certainly my attitude has changed. I think people are growing more concerned about preserving the environment in general.*

Doug Whitlock  
Glacial Heritage Preserve volunteer for 6 years

*The removal of Scotch broom and the removal of the invasive Doug firs – between the two of them, this prairie was just about lost. It used to be that the guy who owned it before the county bought it used it as a cattle farm and there was all kinds of invasive species. There still are invasive species out here, but mostly it was the Scotch broom that had absolutely engulfed it. It was “old-growth” Scotch broom!*

Michelle Blanchard, Volunteer and Adjacent Landowner  
Glacial Heritage Preserve volunteer for 12 years

*We were one of the original – what did they call us – the weed whackers, broom busters – Broom Attack Team!*

William Funk  
Glacial Heritage Preserve volunteer for 12 years