Why volunteer for the environment? An exploration of environmental volunteer motivation, satisfaction and retention.

by

Angela Tamara Hunter
B.Sc., University of Victoria, 2004

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

MASTER OF ARTS

in the Department of Geography

Supervisory Committee

Why volunteer for the environment? An exploration of environmental volunteer motivation, satisfaction and commitment in the Capital Regional District.

by

Angela Tamara Hunter
B.Sc., University of Victoria, 2004

Supervisory Committee

Dr. Rick Rollins, (Department of Geography)
Co-Supervisor

Dr. Dan J. Smith, (Department of Geography)
Co-Supervisor

Dr. Rosaline Canessa, (Department of Geography)
Departmental Member

Abstract

Supervisory Committee

Dr. Rick Rollins, Department of Geography
Co-Supervisor
Dr. Dan J. Smith, Department of Geography
Co-Supervisor
Dr. Rosaline Canessa, Department of Geography
Departmental Member

The future of environmental conservation ultimately depends on the collective impact of actions taken by individuals. While many people choose to engage in environmentally responsible behaviours, such as recycling or using public transit, some people are going a step further by volunteering with environmental organizations. These environmental volunteers undertake a variety of roles that are essential to the overall functioning and program delivery of most nonprofit environmental organizations.

A major challenge of using volunteers can be the rate of volunteer turnover which increases the need to recruit and train new volunteers. Drawing on past volunteer motivation and satisfaction research, this study seeks to better understand what motivates environmental volunteers and to identify what factors contribute to volunteer satisfaction and retention. A questionnaire with Likert scale and open ended questions was completed by 148 environmental volunteers in the Victoria Capital Regional District. Factor analysis of the survey responses identified nine potential motives for volunteering with environmental organizations: Career, Environmental Values, Personal Growth, Protective, Social Norms, Social Interests, Efficacy, and Independence.

The identified motivational factors were used to develop a cluster analysis, which identified six potential groupings or types of individuals attracted to volunteering with environment and conservation organizations. The six groupings identified were Practical

Environmentalists, Concerned Environmentalist, Career Environmentalist, Budding Idealist, Social Environmentalist, and Other Helpers.

Questions regarding volunteer satisfaction identified six factors that affect volunteer satisfaction: Organization Satisfaction, Individual Freedom, Personal Contribution, Environmental Impact, Intrinsic Rewards, and Personal Benefits. Satisfaction with these factors, however, was not enough to predict volunteer retention. Barriers to volunteering, such as health, location of volunteer activities, and other commitments also contribute to discontinuation of volunteer service. The results of this study can be useful for volunteer management and organization of volunteer programs in order to recruit and maintain satisfied volunteers.

Table of Contents

List of Tables

List of Figures

Acknowledgments

The completion of this research was only possible thanks to the time and support of many people. I would like to thank Dr. Rollins for his ongoing patience, guidance, and encouragement throughout the whole process of this research project. I would also like to thank my committee members, Dr. Canessa and Dr. Smith for their feedback and recommendations on various edits of this thesis. Many thanks to all of the volunteers and environmental organizations that took the time to respond to my lengthy questionnaire, research could not be conducted without wonderful people like you. Finally, I could not have done this without my father, step mother and best friend who provided me with their listening ears and helped me through late night editing sessions.

1.0 Study Overview

1.1 Introduction

Ecosystems and the services they provide are under pressure from human activity and consumption of natural resources. Sustained consumption at the current level can have drastic long term consequences for the health of the planet (Millennium Ecosystem Assessment, 2005). In response to concern for the environment, many Canadians are attempting to take responsibility through their actions. Recycling, reducing waste, taking public transportation, and using energy efficient appliances are examples of the most basic and widely accessible opportunities for engaging in environmentally significant behaviour (Stern, 2000). Some individuals also recognize the value of aligning themselves with organizations devoted to environmental conservation. While this can be done by donating money and becoming a member of environmental organizations, some people further invest their time and skills to protect the environment through volunteering.

Volunteers are an essential part of many nonprofit environmental organizations. Utilizing volunteers allows organizations to undertake larger projects and initiatives that they could not afford to maintain with paid staff (Hall et al., 2001). Volunteers are also advocates and they often represent the public face of their organizations. While volunteer service is invaluable, there are still costs associated with recruiting, training and managing volunteers. High volunteer turnover increases recruiting and training costs which diverts resources from other important initiatives (Hager & Brudney, 2005).

In order to help improve volunteer retention rates, this study aims to gain a better understanding of why people choose to volunteer for environmental organizations and what factors contribute to their satisfaction. The "Volunteer Life Cycle" (VLC) is used as a framework to situate the ever evolving relationship between volunteers and environmental organizations in relation to volunteer retention (Bussell & Forbes, 2003). The four stages of the VLC are directly associated with volunteer motivation, satisfaction

and long term commitment. An overview of volunteerism, environmental nonprofit organizations, the Volunteer Life Cycle, and relating motivation and satisfaction factors that influence volunteer retention will be presented to contextualize the research study.

1.2 Volunteerism in Canada

"Much of our quality of life depends upon the commitment and service of volunteers." (Canadian Volunteerism Initiative, 2001: 1)

A national survey of volunteering in Canada found that in 2007 46% of Canadians volunteer their time to some extent for nonprofit or charitable organizations (Hall et al., 2009). An estimated total 2.1 billion volunteer hours was contributed with a median of 56 hours per volunteer. The four organization types to receive the highest volunteer rates by percent of volunteers were sport and recreation (11%), social services (11%), education and research (10%) and religion (10%). These organizations also received a total of 62% of all volunteer hours. Environmental organizations, identified as organizations that engage in conservation, animal protection, environmental education and health, and pollution control and prevention, received 3% of reported volunteer hours contributed by 3% of Canadian volunteers. This percent closely compares to the other organizations in the bottom four with arts and culture receiving 4% of volunteer hours, hospitals receiving 3%, and law, advocacy, and politics receiving 3%. In total, Canadians contributed the equivalent of almost 1.1 billion full-time jobs in 2007.

Salamon (2002) identifies five community building roles of nonprofit organizations. To begin with, they provide essential services such as emergency shelters, food banks, and hospice care. Through advocacy they bring important issues to public attention. They establish a framework in which the community can manifest social and cultural expression such as art, religion, or recreational opportunities. Nonprofits have the ability to connect people and to build social capital that strengthens communities through trust and reciprocity. Finally, nonprofit organizations are the guardians of our social values where people are brought together to act as individuals in solidarity with others for the

common good. Environmental nonprofit organizations can and do fulfill each of these community building roles (Dunlap & Mertig, 1992).

A 2003 survey of nonprofit and voluntary organizations in Canada identified 4,424 environmental nonprofit organizations who reported using a total of over 700,000 volunteers (Canadian Environmental Grantmakers' Network, 2004). Direct positive impact on environmental protection and conservation is achieved by these organizations through projects such as land securement, stewardship programs, restoration, and financing conservation (Barla et al., 2003). Further contributions are made through environmental education campaigns, lobbying, research, and consulting on conservation projects (Mitchell et al., 1992).

The focus of this study is on nonprofit organizations within the environmental field. This includes a variety of organizations that contribute to environmental protection. Forms of environmental protection and the term environmentalism itself cover a wide range of values, and meanings and actions (Mauch et al., 2006). Within the environmental field ongoing debates exist with regards to the acceptable level of human-environment interaction such as conservation and management of natural areas versus preservation of wilderness. This study does not aim to take sides, rather, the term environmental organization is meant to include organizations that seek to curtail the impacts of human-caused threats to the natural environment such as pollution, and unsustainable resource consumption.

Considering the myriad of human actions that impact the health of the environment, an equally broad variety of environmental organizations exists with the aim of stopping or at least controlling these human actions. As mentioned above, some environmental organizations aim to directly protect the environment. This may be accomplished through projects such as purchasing land for protection or engaging in restoration projects to restore the health of an ecosystem to its state prior to destructive human or natural activities. In this paper these organizations are referred to as conservation organizations

and the majority of research into environmental volunteerism is with conservation organizations.

The term environmental organization is used in this paper as a more general term which includes conservation organizations as well as other organizations who aim to prevent humans from engaging in environmentally harmful activities. Prevention comes in the form of environmental education, lobbying for government regulations that will benefit the environment, or researching human impact on the environment to strengthen education and lobby campaigns. The ultimate goal which all have in common is to maintain long term health of the earth's biosphere for the plants and animals that live within it.

While environmental protection may be accomplished without the use of volunteers, management of threatened or protected areas and conservation projects often require a large amount of labour to undertake restoration and monitoring (Cuthill, 2000). The inclusion of community members as volunteers in environmental projects such as restoration and stewardship programs can result in impacts beyond specific programs (Light, 2002). Benefits of community involvement include increased support for and understanding of the conservation project and resource stewardship (Alberts & Grant, 2003; Newman et al., 2003). Volunteering also creates a sense of ownership and pride within the community that can contribute to the success of a project (Cuthill, 2000; Light, 2002; Ralston & Rhoden, 2005). Both volunteers and organizations benefit from volunteering as it aims to develop skills, knowledge and understanding while achieving organization goals. Some concerns have been raised regarding the use of volunteers in place of paid professionals. Research has shown, however, that properly trained volunteers can collect scientifically useful data in monitoring programs (Bell et al., 2008; Newman et al., 2003). Ultimately, the cost of labour and the vast amount of time needed to achieve conservation goals require the use of volunteers.

By using volunteers organizations benefit through the provision of labour, access to valuable skills, advocacy for the organizations and their projects, and increased

community ownership in conservation (Bell, 2003). Likewise, volunteers have the ability to benefit in a number of ways, such as personal satisfaction (Miles et al., 1998), training and skill development, and the formation of friendships. The most important beneficiary is likely to be the natural environment, through the ongoing protection of essential life giving ecosystems.

1.3 Environmental and conservation initiatives in the CRD

Situated on the southern tip of Vancouver Island, British Columbia, the Victoria Capital Regional District (CRD) encompasses several different natural ecosystems ranging from old growth Coastal Douglas-fir forests and Garry Oak meadows, to salmon spawning streams and the Juan de Fuca Strait. The abundance and variety of terrestrial and marine natural areas is important to local quality of life (Alexander et al., 2004) and is a major part of the area's tourism industry (Tourism British Columbia Research Service, 2007). According to the Biodiversity Atlas of British Columbia, however, the Coastal Douglas-fir biogeoclimatic zone has experienced the most human impact of any zone in the province of British Columbia (Austin & Eriksson, 2009).

The CRD's coastal marine environment also faces pressure from human activities. The near shore environment is home to eelgrass meadows and bull kelp forests that are essential foraging grounds for birds, protective habitat for young salmon and herring and a wide variety of molluscs and crustaceans (Wright, 2002). Human activities such as dredging and filling of harbour areas and urban development increase siltation in local streams. These activities affect the supply of fresh clear water and access to sunlight for these plant ecosystems. Urban run-off, containing toxic chemicals and excessive nutrients from fertilizers, enters into local streams further impacting the health and sustainability of near shore ecosystems.

Local ecosystem sensitivity and environmental issues related to island living, such as limited landfill space, minimal sewage treatment, and loss of agricultural land due to development, have resulted in a range of local environmental groups forming within the CRD. The fact that Victoria is the provincial capital has further contributed to the establishment of many provincial and national environmental organizations whose goals are to educate the public and to influence public policy. Examples include Lifecycles, The Compost Education Centre, The Sierra Club of British Columbia, The Land

Conservancy of British Columbia, The Western Canada Wilderness Committee and Veins of Life Watershed Society among other organizations.

The Victoria yellow pages (2009) lists 12 nonprofit organizations under Environmental Conservation and Ecological Organizations. An internet search for local environment and conservation organizations reveals another 12 groups that address a range of environmental concerns. Small community and neighbourhood groups with committees that lead specific environmental projects (largely conservation and restoration projects) could also be considered environmental organizations. They are, however, small scale and the fact that they are generally entirely volunteer run has resulted in their lower profile and made them difficult to count. Collectively, environmental organizations in the CRD work to ensure that both the government and the public are aware of environmental issues such as the limited space left in the local landfill, threats to endangered species and ecosystems, and opportunities for engaging in positive environmental actions. A wide range of volunteer opportunities exists, from fundraising and public education to steam cleanups, and invasive species removal, depending on personal interest and abilities.

1.4 The volunteer life cycle

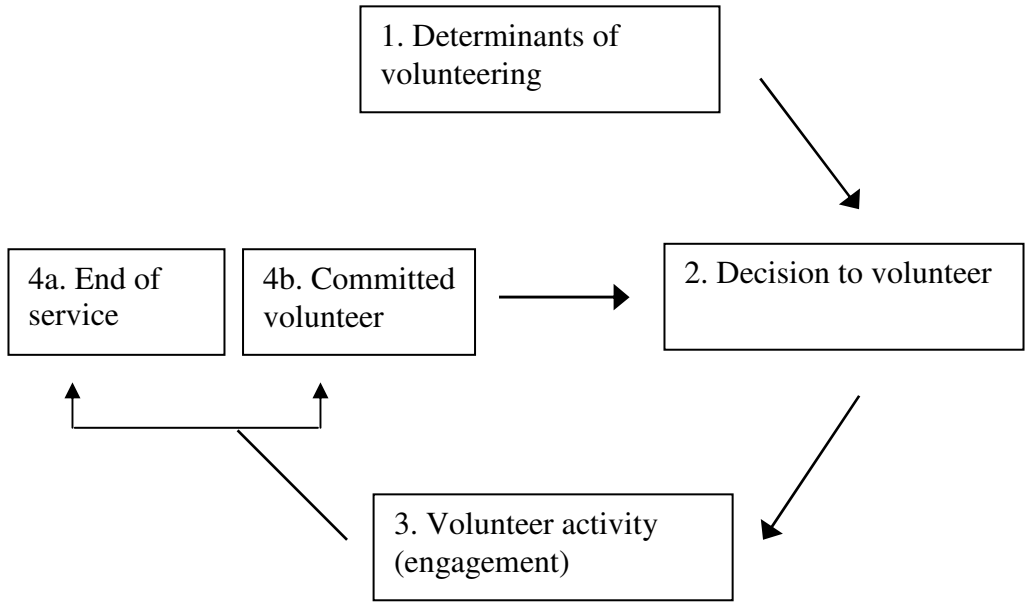
Despite considerable benefits of volunteering to both the public and to organizations, there are costs involved. Volunteer labour is sometimes thought of as free labour because volunteers are not paid for their work (Brudney, 1999). Using volunteers, however, can be costly because they need to be recruited, organized, trained, supervised, and recognised for their efforts. At minimum, in order to run a volunteer program volunteers need to be recruited and assigned tasks. Even then recruiting volunteers requires time and funding, both of which are often in short supply in nonprofit organizations (Martinez & McMullin, 2004).

In order to better understand the determinants of volunteer commitment and to improve volunteer retention Bussell and Forbes (2003) created the VLC which consists of four stages (Figure 1.1).

- Determinants of volunteering
- The decision to volunteer
- Volunteer activity
- The committed volunteer or volunteer exit

Initially, an individual develops an interest in volunteering and an awareness of what they can do as a volunteer. Determinants of volunteering are the initial motives that lead people to want to volunteer. It is during this first stage that organization marketing is most effective for recruiting volunteers. Secondly, this individual makes the decision to volunteer and takes action by approaching an organization. The organization will offer the potential volunteer one or more opportunities and continuation to the third stage is achieved when a fit is found between the individual's motives and interests and the organization's opportunities. The individual will either begin volunteering, or if unsatisfied with the opportunities presented, he or she will move on to another organization or activity. In the third stage of the VLC the individual has found an interesting opportunity and begins to volunteer. Application of volunteer retention strategies during the activity stage was found to be essential to achieving the fourth stage of the committed volunteer. Inability to maintain volunteers was found to be affected by changes in volunteer needs or their life's situation.

Figure 1.1 The Volunteer Life Cycle (Bussell & Forbes, 2003)



Using the VLC model, it is possible to identify where research on volunteer participation fits within a volunteer's time of service. Bussell and Forbes (2003) incorporated retention strategies into the volunteer activity stage. Other studies have shown that volunteer retention is part of the evolving volunteer experience and can be influenced by initial motivation (Clary et al., 1998), satisfaction with the volunteer experience (Galindo-Kuhn & Guzley, 2001), and barriers (Martinez & McMullin, 2004) that inhibit continued service.

1.5 The purpose of this study

A renewed public awareness of environmental conservation is emerging in Canada. Prominent media coverage on climate change and public education campaigns led by well-known public figures, such as Al Gore in his movie *An Inconvenient Truth* (Guggenheim, 2006), are leading people to re-examine their lifestyle choices and how they impact the environment. A survey conducted by the Strategic Counsel in January, 2006, found that health care was overall the most important issue to Canadians with 25% listing it at the top of their list (CTV Staff, 2007). The environment was most important to only four percent of Canadians. A year later the environment became the most important overall issue with 26% of surveyed Canadians specifying the environment and only 18% identifying health care. This resurgence of environmental consciousness and interest in conservation provides an ideal environment for engaging citizens in volunteering for conservation. This study seeks to provide insight into the environmental volunteer experience so that organizations can develop effective volunteer opportunities that maximize the benefits for organizations, volunteers and the environment.

This study seeks to better understand the factors that influence decision making as volunteers move through the VLC. The primary focus will be on initial motive for volunteering supplemented by satisfaction with the volunteer experience and barriers to volunteering. By understanding what motivates volunteers and by identifying barriers and areas of dissatisfaction, this study will aim to inform volunteer programs regarding volunteer retention.

The research objectives are:

1. To describe the characteristics of participating environmental volunteers.
    a. What are the volunteer demographics of participating environmental volunteers?
    b. What is the personal volunteer history of participating environmental volunteers?

2. To identify the range of factors which motivate individuals to volunteer for environmental organizations in the Capital Regional District.
    a. Why do people begin to volunteer?
    b. Can volunteers be meaningfully grouped into categories based on their motivations?

3. To assess volunteer satisfaction with the volunteer experience.
    a. What factors contribute to volunteer satisfaction and dissatisfaction?
    b. To what extent are volunteers satisfied with their experience?
    c. How does volunteer satisfaction relate to volunteer retention?

4. To identify the barriers which prevent or reduce volunteer participation.
    a. What other priorities affect volunteer engagement?
    b. What barriers exist that prevent willing volunteers from being involved?

1.6 Methodology

This study takes a multi-method approach through the use of a questionnaire that combines quantitative and qualitative questions. The questionnaire consisted mainly of Likert-style questions, multiple option questions and a limited number of open ended questions to provide opportunity for participants to elaborate on their responses. Research participants were past and present volunteers of environmental organizations within the CRD. Semi-structured interviews with volunteer coordinators from local environmental organizations were also used to gain perspective of the value and role of volunteers within local environmental organizations.

1.7 Geographical fit

This thesis is situated within the field of human geography. More specifically, the research comes from a behavioural geography approach which recognizes the complexity of human behaviour in relation to human-environment relationships (Gold, 1980). The behavioural geography approach is typically defined by four main features (Gold, 1980):

1. Behavioural geographers recognize that human action and decision-making occur in both the physical 'objective environment' and the 'behavioural environment' of the mind.
2. It is understood that human behaviour is impacted by the physical and social environment and in turn impacts the environment as part of a cyclical chain of events.
3. Most often behavioural geography approaches behaviour and cognition on an individual level rather than as a social group. This is emphasized by collecting individual and small group data rather than using mass-produced statistical data sets (Johnston, 1991).

4. Behavioural geography is multi-disciplinary and draws from behavioural science traditions such as psychology, sociology, and anthropology among others.

The tradition of behavioural geography has been applied to a wide variety of research areas. For example, human choice behaviour in tourism, leisure and recreation aims to better understand factors that affect individual decisions to travel to specific destinations and engage in different leisure activities (Kyle et al., 2003; Needham & Rollins, 2005). When exploring human motivation, experience, benefits, and satisfaction with relation to space and place, environmental psychology and human geography blend together to determine how these factors relate and influence human-place interaction (Williams & Patterson, 1996).

By looking at the motives that influence people's decision to volunteer with environmental organizations this research makes connections between humans and the environment. Research methods and theory from psychology's approach to volunteer motivation provide the framework around which this study is based, while also drawing literature from the field of serious leisure, non-profit management, and resource management.

1.8 Structure

This thesis consists of 5 chapters. Background literature relating to volunteerism, volunteer motivation, satisfaction and sustained volunteerism are presented in Chapter 2. Within the general volunteerism literature, each chapter section also presents a focused discussion on environmental volunteers. The research method, questionnaire design and approach to data collection used in this study are detailed in Chapter 3. Chapter 4 presents descriptive study results as well as statistical analysis of the volunteer survey. Finally, Chapter 5 discusses this study's main findings in relation to the volunteer literature and draws conclusions and recommendations for further study. Strengths and limits to this research are also presented in the final chapter.

2.0 Literature review

2.1 Introduction

This study examines volunteers for environmental organizations within Victoria, British Columbia's CRD. High rates of volunteer loss combined with ongoing search for new volunteers fuels the need to better understand ways to improve volunteer retention. This research uses the Volunteer Life Cycle (VLC) model (Bussell & Forbes, 2003) as a framework to outline each stage of the volunteer experience. Individual factors that influence volunteer decision making are studied and situated within the life cycle.

This literature review provides an in-depth look at volunteerism and volunteer retention in relation to volunteer motivation and satisfaction. Within the VLC motivation is essential to understanding the reasons why people begin to volunteer. Motivation is also directly linked to satisfaction and it influences the factors that result in discontinuation of volunteer service. Other components of volunteer satisfaction, such as organization management and volunteer activities also influence volunteer retention. This study builds on the Volunteer Function Index (Clary et al., 1998), the Volunteer Satisfaction Index (Galindo-Kuhn & Guzley, 2001) and research specific to environmental volunteers (Donald, 1997; Kidd et al., 1996; Martinez & McMullin, 2004; Ryan et al., 2001). Connections are made between the general volunteer literature and environmental volunteer literature in order to situate the present study and identify gaps from which to develop new research projects.

2.2 Definition of volunteering

In order to gain a better understanding of volunteers, it is important to define the term volunteer. After reviewing a selection of volunteer literature, Cnaan, Handy and Wadsworth (1996) found that a wide range of definitions exist along a continuum ranging from a "purist" definition to a broad inclusive definition of volunteer. Four dimensions

were identified as being key to placing a definition along the continuum: the option to volunteer, the benefits received by the volunteer, the context of the work, and the beneficiaries of the work.

The first dimension, the option to volunteer, ranges from "pure" volunteers who give their time willingly, to those who must volunteer. For example individuals completing a school requirement or who volunteer as part of a court order are not pure volunteers. The second dimension of volunteering is determined by the benefits received by the volunteer. On the "pure" end of the continuum, volunteers should act without reward or compensation, maybe even bearing the cost of expenses to volunteer. On the other end, as long as the remuneration received is less than the value of their time, work, and expenses, then individuals are still considered volunteers.

The context of the voluntary work forms the third dimension of volunteer. A strict definition of volunteer requires that work be organized through a formal organization. A broader definition would allow informal help to private individuals, such as a neighbour, to be considered volunteering. The final dimension that defines volunteer is the beneficiary of the voluntary work. Purists state that beneficiaries must be strangers with whom the volunteer has nothing in common, while a broad definition allows volunteer work to benefit peer groups, family, or even the volunteer themselves as part of a self-help group.

As will be seen, very little volunteer work falls under the "pure" end of the continuum. It is rare for volunteers to receive no benefit from their actions and the reciprocal benefits of volunteering are found to actually improve the relationship between volunteers and organizations (Barr, 1971). Statistics Canada briefly defines volunteering as "doing unpaid activities as part of a group or organization" (Hall et al., 2001). This research project will look at volunteers in organized environmental and conservation organizations and will use a broad and inclusive definition of volunteering as created by Stebbins and Graham (2004, pg. 5). "Volunteering is uncoerced help offered either formally or

informally with no or at most token pay done for the benefit of both other people and the volunteer."

2.3 Volunteers in environmental organizations

While environmental organizations engage volunteers in many of the same activities as social organizations (outreach, board members, fundraising etc.), volunteers are also sometimes used for conservation related activities such as ecosystem restoration, monitoring and research. Despite reservations about the quality of volunteer work, research has shown that properly trained volunteers can collect scientifically useful data in monitoring programs (Newman et al., 2003; Pattengill-Semmens & Semmens, 2003). There is no doubt that volunteers can make essential contributions to conservation and environmental protection; however, there is debate surrounding the extent to which volunteers should be used. Whitaker (2003) sees the use of full time volunteers and low paid interns as exploitation of workers and a potential impediment to conservation. Natural resources are valuable and governments should be willing to invest in their conservation. Extensive use of volunteers and low paid interns can be a sign that insufficient priority is given to resource conservation. Over use of volunteers and interns can result in the loss of talented workers to other areas as few people are able to make extensive volunteer commitments without sacrificing paid work or family commitments.

On the other hand, even when governments invest heavily in conservation, resource management and conservation projects often require a large amount of labour to undertake restoration and monitoring programs (Cuthill, 2000). Community based resource management practices require that community members be involved in the planning and implementation of local management projects. Benefits of community involvement include increased support for and understanding of the conservation project and resource stewardship (Alberts & Grant, 2003; Newman et al., 2003; Pattengill-Semmens & Semmens, 2003). Volunteering also creates a sense of ownership and pride within the community that can contribute to the success of a project (Cuthill, 2000;

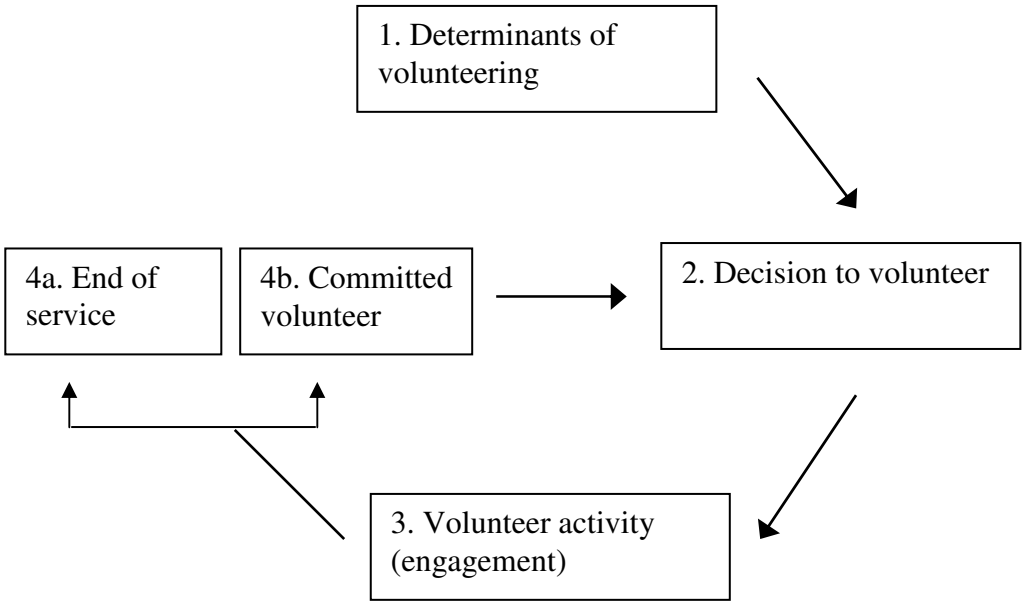
Ralston & Rhoden, 2005). Volunteer based conservation programs aim to be mutually beneficial through providing the opportunity to develop volunteer skills, knowledge and understanding while achieving conservation goals.

2.4 The volunteer life cycle

The effective use of volunteers requires that the benefits of volunteers be greater than the costs of maintaining them (such as recruitment, training, coordinating). When the cost of volunteers is too high, organization resources are depleted instead of multiplied. As was mentioned earlier, increasing volunteer retention is often cited as one of the main areas in which organizations can reduce volunteer related costs. Keeping volunteers long-term has many benefits, including less investment in new volunteer recruitment and training.

The four stage VLC model (Figure 2.1) begins when an individual develops an interest in volunteering and an awareness of what they can do as a volunteer. (Bussell & Forbes, 2003, pg.63). This awareness enters them into stage one where they have determined that they would like to volunteer. Secondly, this individual begins to act on the desire to volunteer by selecting and becoming involved with an organization. The organization will offer an opportunity. At this point the individual has two choices. He or she will either decide the opportunity is satisfactory, or that the opportunity is not satisfactory and will move on to another organization or activity. Accepting a volunteer opportunity and beginning to engage in volunteer activity brings the individual to the third stage of the VLC. Finally, after some time, the individual will either stop volunteering for one or more reasons, or will become a committed volunteer and will decide to continue volunteering.

Figure 2.1 The Volunteer Life Cycle (Bussell & Forbes, 2003)



The Bussell and Forbes (2003) model incorporates retention strategies into the volunteer activity stage. When used to situate other volunteer retention literature, the VLC model can identify several key time periods where possible initiatives can increase volunteer retention. Three main factors have been found to impact volunteer satisfaction, commitment and retention. Firstly, volunteer satisfaction and intention to continue volunteering has been positively linked to volunteers' motives matching their experience (Clary et al., 1998). Therefore, gaining a better understanding of why people volunteer with environmental organizations can help with development of opportunities that satisfy volunteer motives. Secondly, volunteer motives have been found to change over time. Therefore fostering the development of new volunteer motives can increase volunteer retention. For example, creating friendships within an organization or instilling a sense of efficacy were found to be predictors of intention to continue volunteering (Galindo-Kuhn & Guzley, 2001). Finally, volunteer management practices (Hager & Brudney, 2005) and organizational support (Galindo-Kuhn & Guzley, 2001), such as training, supervision,

and recognition contribute to volunteer satisfaction and intention to continue volunteering.

The roles of volunteer motivation, satisfaction and management style have been researched independently, but they have not been brought together in a single research project. This is surprising considering that volunteering is a continuously evolving experience. A focus solely on one aspect or time period of the volunteer experience results in an incomplete understanding of the interactions that can contribute to discontinuation of volunteer service. The VLC model can be used in an attempt to bridge the different streams of volunteer retention literature. This model can serve as a timeline map to identify potential periods where specific interventions may be useful for influencing volunteer retention.

2.5 Initial volunteer motivation

What motivates a person to begin volunteering? Human motivation to engage in behaviour is complex, goal-directed, purposive, and a variety of factors can contribute to motivating or discouraging a person to engage in a specific behaviour (Moore, 1985). While the desire to help others is often given as a reason for volunteering, several authors have attempted to itemize other motivating factors that lead individuals engaging in volunteer behaviour (Table 2.1).

Table 2.1 A comparison of volunteer motivation research

	Motivation theories, inventories			Research findings of environmental organization volunteer motivations			
Dimensions of volunteer motivation	Clary et al., 1998	Omoto, 1995	Schram, 1985	Ralston & Rhoden, 2005	Martinez & McMullin, 2004	Ryan, Kaplan & Grese, 2001	Donald, 1997
Greater good	• Values	• Values • Community Concern	• Altruism	• Environmental altruism	• Efficacy, a desire to positively contribute	• Help the environment	• Help the project • Provide useful service
Personal benefit/ rewards/needs	• Enhancement	• Personal Development • Esteem enhancement	• Utility Theory • Exchange Theory • Expectancy theory • Maslow's hierarchy of needs.	• Free time leisure activity • Intrinsic rewards • Enhance immediate Personal environment • Need to achieve things • Personal growth, health, • socializing	• Enhance trail for personal use • Meet other people • Ability to grow as an individual • socialize	• Having fun • See familiar faces • Feel needed • Meet people • Opportunity to reflect	• Enjoy activities • Meet new people • Family activity • Raise community profile • Increase property value • Experience personal growth
Skill development	• Career	• Understanding	• Human Capital Theory	• Personal development	• Work experience	• Learn about nature	• Learn more about specific problems
Family and peer values	• Social		• Socialization		• Know others involved		• Encouraged by friend
Ego – guilt	• Protective			• Relieve frustrations • "Putting something back"			• Sense of responsibility to environment

Schram (1985) explored six early motivation theories within the context of volunteering: utility theory, human capital theory, exchange theory, expectancy theory, need fulfillment, and socialization. Utility theory describes people who volunteer because their time spent volunteering provides the best return for their time. Their costs are equal to the benefits they receive. For example having a parent volunteer in a group may increase a child's status or opportunities within an organization. Human capital theory is dependent on the benefits received by volunteering, specifically in the area of personal improvement, such as skill development, knowledge gain, or future employment contacts.

Exchange theory is motivated where the volunteer believes that their reward for volunteering (for example social status, or friendships) is at least equal to the cost of volunteering (for example time, effort) (Chinman & Wandersman, 1999). Expectancy theory depends on expected outcomes from the volunteer work. For example a volunteer may expect that they will make new friends, or that their work will achieve a specific goal. Expectancy theory is different from exchange theory in that expected outcomes are not guaranteed and are not exclusively personally rewarding. Volunteering can also be used to fulfill part of Maslow's hierarchy of needs, mainly the top three needs: social, self-esteem, and self actualization (Maslow, 1954). These theories tend to focus directly on the potential personal opportunity and material gains to volunteers.

The final theory explored by Schram (1985) is less focused on personal gain and more on satisfaction and values. Socialization has been credited with motivating volunteer work through the passing on of values and beliefs from friends and family. Schram's study, as well as others (see Farmer & Fedor, 1999), found that most volunteers have some element of altruism as a motivator for their participation. At the same time, almost all participants received some amount of personal or familial benefit from volunteering. This motivation theory fits best with the purist view that altruism is the only acceptable reason for volunteering.

More recent research and experience shows that a mutual relationship can produce the most dedicated and effective volunteers (Butcher, 2003; Clary et al., 1996; Omoto & Snyder, 1995). After empirically studying twenty eight possible volunteer motives, Cnaan and Goldberg-Glen (1991) found that volunteers had both altruistic and egoistic motives to volunteer within a unidimensional scale. No one motive or category could be identified as most influential because motives overlap and volunteers rarely have one distinct motive for volunteering.

The Volunteer Function Inventory (Clary et al., 1996), which evolved into the Volunteer Function Index (VFI) (Clary et al., 1998), originally developed using the functional theories attributed to beliefs and behaviours (Clary et al. 1996). The resulting VFI has been used as a framework to organize and categorize volunteer motivation in order to determine how volunteers differ from each other and from non-volunteers. The index consists of six categories of possible motives one may have to volunteer: values, protective, career, social, understanding, and enhancement.

Testing the index revealed that people can have multiple motives for volunteering (Clary et al. 1996). However, motivation patterns coincided largely with the amount of volunteer experience one had and at what point in their careers volunteers happen to be (Clary et al. 1998). Career and understanding were more important to newer volunteers than those who had volunteered more than three years, while both groups reported similar levels of importance for protective, values, social and enhancement motives. A more recent study using the VFI by Allison et al. (2002) found that people also listed enjoyment, religiosity, and team building as motives for volunteering which did not fit directly within the VFI questions.

2.5.1 Motivation to engage in environmentally significant behaviour

While most research on volunteering has focused on volunteers with social services organizations, an increased interest is being given to environmental volunteers. When the two are compared, the motivations expressed by social services volunteers are

comparable to those expressed by environmental volunteers, such as a desire to help others. Environmental volunteers, however, are also likely to be motivated by the desire to actively engage in environmentally significant behaviour beyond recycling and other increasingly mainstream eco-friendly activities. As such, it is important to understand and include motivation to engage in environmentally significant behaviour as part of environmental volunteer motivation.

Several studies have identified major steps required in order for a person to begin an intrinsic, self determined environmental action (Hines et al., 1986; Kaplan, 2000; McKenzie-Mohr, 2000; Monroe, 2003; Stern, 2000). To begin with, a person needs to be aware that there is a problem (Hines et al., 1986). Often this will be followed by a feeling that something important to them is being threatened. Next a person has to realize that there is something they can do to improve the situation (Stern, 2000). Finally, a person needs to feel that it is their responsibility to act to the best of his or her ability in an effort to improve or protect the environment (Hines et. al., 1986).

Within self determination theory these steps fall under the need to create feelings of competence (ability to make a difference) and facilitate autonomy (personal action and responsibility) (Deci & Ryan, 2000). Kaplan (2000) argues that altruistic attempts at motivating people by presenting the problem without a viable solution can cause feelings of helplessness and may actually decrease motivation for engaging in environmentally responsible behaviour. Instead, he proposes the Reasonable Person Model where emphasis is on the contributions behaviour has on improving quality of life. When people understand how their behaviour will make a difference in their life, they will be more willing to act.

The motivation toward the environment scale (MTES) was created using the self-determination continuum which ranges from completely intrinsic motivation to completely extrinsic motivation (Pelletier et al., 1998). The MTES was used to measure where along the self-determination continuum an individual is motivated to engage in environmental behaviours. MTES confirms that more intrinsic motivation and perceived

competence are positively related. In other words, if a person believes they have the ability to affect change, they are more likely to engage in environmentally responsible behaviour. Another MTES study found that the level of effort a person is willing to exert is correlated with whether or not a person is self-determined toward environmental behaviour (Green-Demers et al., 1997). As the degree of perceived difficulty of an environmental behaviour increased, those who were externally motivated were much less likely to undertake the behaviour than intrinsically self-determined individuals. Once again, a lack of connection between the importance of one's actions was shown to result in amotivation.

2.5.2 Motivation to volunteer for the environment

While environmental organizations engage volunteers in many of the same activities as social organizations (outreach, board members, fundraising etc.), volunteers are also used for conservation related activities such as ecosystem restoration, monitoring and research. What motivates an individual to engage in environmentally responsible behaviour as a volunteer, and how can organizations maintain volunteer interest? Literature on environmental volunteerism supports the aforementioned models of environmentally significant behaviour. However, the tangible rewards that one can get from volunteering with a human may take longer to appear when engaging in some types of environmental conservation work. Planting a tree or pulling weeds, for example, may take several years before an area looks healthy. Several environmental volunteer studies have shown that volunteers need to know that their work is effective, they value social interaction with likeminded individuals, and they are motivated by the opportunity to learn new knowledge and skills.

A study of active and nonactive members of the Appalachian Trail Conference revealed several factors that impacted member volunteer activity (Martinez & McMullin, 2004). Most importantly, member volunteers were influenced by their perceived effectiveness and contribution of their volunteer work. Other factors contributing to participation

include longer term membership in the organization, and social connections within the organization. The main reason given by non-active members was competing commitments. These members perceive their time to be more effectively used elsewhere. Further reasons for non-activity include age and physical limitations, distance to activities, and lack of information about activities.

A similar earlier study examining active and non-active members of the Sierra Club found that both were equally concerned about the environment, but that active members were more likely to believe that they had been directly harmed by an environmental problem (Manzo & Weinstein, 1987). Active members were also more likely to have friends or family who were active members of the Sierra Club. The majority of nonactive members had also never been asked to volunteer, which may partially account for their inactivity if they did not know what volunteer opportunities were available.

Cycle trail volunteers in the United Kindom were found to have a wide range of motivations (Ralston & Rhoden, 2005). Using a survey with open ended questions, the volunteer motivations included environmental altruism, leisure pursuit, personal development, “putting something back” to nature, intrinsic rewards, benefits from enhancing one’s immediate personal environment, a need to achieve something, relief of paid work frustrations, health benefits, and socializing opportunities. Within environmental volunteer research, responses such as “putting something back” into the community (Ralston & Rhoden, 2005, p. 107) and paying back debt to nature (Kidd et al., 1996) are often given as motives for volunteering.

Three principle motivations were identified among volunteers engaging in biodiversity monitoring programs in six European countries (Bell et al., 2008). Social interaction with like-minded individuals, either in person or virtually through online forums, was found to be important to all groups of volunteers in the study, even those that also value the opportunity to be alone in nature. Volunteers felt that their activities were an opportunity to improve their quality of life and wanted to know that their work was useful and

valuable. Finally, interest in learning and applying new skills was found to be a key motivator that affected volunteer retention.

Understanding and learning was also identified as being important to volunteer motivation among Iowa Community Tree Steward volunteers. The opportunity to learn about tree care was the most frequently cited motivation for joining the program. Other prominent motives included environmental values, concern for the community and the opportunity for social interaction. Personal development through the opportunity to meet likeminded individuals, however, was most closely related to total hours volunteered. This indicates that, while the desire to learn about trees was a strong initial motivation for volunteering, long term motivation for volunteering changed to the enjoyment of the social aspects of volunteering.

2.5.3 The importance of initial motivation

Understanding volunteer motives from the start of a volunteer's service is important because it sets a foundation on which the organization can structure its volunteer program. The idea of social exchange requires that both the volunteer and the organization benefit from volunteer activities (Schram, 1985). The experience is only mutually beneficial if a volunteer's motives fit with the organization's needs. For example, if a volunteer is motivated to acquire skills and work experience as a volunteer and the only work available is cleaning the office, the volunteer will not have his or her needs met. On the other hand, if a volunteer wants a short term simple task, the organization may lose time finding and passing on an activity just to keep the volunteer happy. A lack of congruency between the organization and the volunteer's needs can result in the volunteer losing interest and loss of training time and money to the organization. Declining the services of an incompatible volunteer, therefore, might be seen as equally important for retaining the services of an active volunteer.

Another motivation factor to consider is how volunteers were recruited. After considerable research surrounding motivations to volunteer, several studies have shown that individuals often do not volunteer simply because they have not been asked (Bowman, 2004; Dekker & Halman, 2003; Freeman, 1997; Martinez & McMullin, 2004). Freeman suggests that "people feel morally obligated to [volunteer] when asked, but would just as soon let someone else do [the volunteer work]" (Freeman, 1997, p. 140). Baramante (2004) found that the ease of engagement in volunteer activities can result in a large number of people signing up, but many lack commitment to follow through with the work. Reasons for dropout include incompatibility of time, disinterest, and misinformation. Rapid identification of reluctant volunteers is important when people do begin volunteering because it is easy to start or they feel obliged. Volunteer coordinators could then invest more time in supporting intrinsic motivation, such as matching the volunteer with a different project. Organizations may also want to reconsider their recruitment methods in order to attract more dedicated and intrinsically motivated volunteers.

2.6 Engaging in volunteer activity

Traditionally, the majority of volunteers engage in long term regular volunteer activities. The episodic volunteer, however, has been identified as an increasingly frequent type of volunteer (Macduff, 2005). As our society moves towards individualism and personal interests away from close community ties, people are choosing not to engage in long term volunteer commitments. Three types of episodic volunteer contributions have been identified. *Temporary volunteers* engage in work that lasts for a short time, such as a few hours or a weekend. For example, a community beach cleanup or a fundraising marathon. *Interim volunteers* are committed to a special project or task on a regular basis for up to six months. Finally, the *occasional volunteer* takes part in a task on a regular basis, but the task occurs only occasionally. An example would be a volunteer who annually volunteers to serve food at a food shelter on Christmas day. It is unknown if episodic volunteers are motivated by the same factors as long term volunteers but are restricted to short term opportunities due to other factors. Macduff (2005) stresses the need for

organizations to learn to adapt to increasing numbers of episodic volunteers in order to fully benefit from volunteer potential.

Regardless of whether a volunteer is long term or episodic, it is in the best interest of organizations to maintain satisfied and motivated volunteers. Clary et al. (1998) found that volunteers whose initial motives had been met by their volunteer experience were happier overall with their activity. Furthemore, the most likely participants to be active up to 5 years after the study were those who were highly motivated to volunteer from the beginning. On the other hand, Allison et al. (2002) found that volunteers highly motivated by values were highly correlated to volunteer frequency, but those motivated by social pressure were negatively correlated with volunteer frequency. Knowing a volunteer's motives can help organizations to target and train highly motivated volunteers in areas where they will be happiest (Clary et. al. 1996).

Once an individual has started volunteering, attempting to facilitate the creation of new, self-determined motivations may affect retention. An in depth study of volunteer satisfaction and retention during the Sydney Olympic Games documented a change in motivations (Green & Chalip, 2004). Initially volunteers were motivated by the belief that they had the skills and confidence needed to be effective, their work would be helpful, their work would be exciting, and their work would be prestigious. However, during the experience new benefits were perceived by volunteers. The final contributors to volunteer satisfaction and retention were the development of a sense of community, learning during the experience, excitement, and the opportunity to help. Motivations that contributed to satisfaction and retention were intrinsic to the experience. Prestige was not mentioned as a final benefit and its absence was not listed as a dissatisfaction among volunteers. As a result, the development and fulfillment of new benefits produced high volunteer satisfaction and retention despite lack of fulfillment of some initial motivations.

2.7 After some time

The VLC is an ongoing loop for as long as a volunteer remains active. A volunteer arrives at the final stage in the life cycle in one of three ways. Either the project or activity that the volunteer was involved in finishes, a volunteer's goals have been met, or the volunteer decides to evaluate his or her volunteer experience. At this final stage a volunteer has three options: move on to other activities of interest elsewhere, develop new goals within the organization, or begin another round by starting the same or similar activity with the organization again. Ideally, a volunteer will return to service with the same organization.

Research and experience have shown that the most dedicated and effective volunteers are sustained within a mutual relationship, where both organizations and volunteers benefit from each other (Barr, 1971; Houle et al., 2005) Likewise, volunteers are most satisfied by tasks that fulfill their goals (Houle et al., 2005). Finkelstein et al. (2005) found that, over time, committed volunteers can develop a role identity where their sense of self is tied to their identity as a volunteer and reinforces their desire to remain. This is the ideal motivator on the self-determination scale (Deci & Ryan, 2000). But what contributes to the creation of a committed volunteer, and what are major areas of dissatisfaction that may dissuade volunteers from continuing long term?

Volunteer retention is related to the management and support capacity of the organization itself (Galindo-Kuhn & Guzley, 2001; B. C. Green & Chalip, 2004; Hager & Brudney, 2004). Two important organization and managerial aspects of the Sidney Olympic volunteer program were identified as contributing to volunteer sense of community, sense of purpose, and efficacy (Green & Chalip, 2004). To begin with, the initial volunteer training program helped to reinforce volunteers' sense of efficacy and ability to perform their task. Volunteer training was also shown to be important because it gave time for relationships, a sense of community, and a sense of purpose to form among volunteers. Secondly, volunteer managers took the time to continually engage volunteers through team building and newsletters. The actual dedication of a volunteer team leader to "build

and maintain their volunteer teams" likely contributed significantly to the overall satisfaction of volunteers (Green & Chalip, 2004 pg. 63).

The Volunteer Satisfaction Index (VSI) was created by Galindo-Kuhn and Guzley (2001) in order to adapt traditional job satisfaction research to fit within unpaid work environments. Volunteer work is different from paid work in that volunteers are not dependent on benefits and remuneration and as a result are free to leave if not satisfied. On the other hand, volunteers may have increased feelings of obligation towards the work or voluntary organization that compel them to stay despite lack of benefits. Also, the perceived value of intrinsic rewards is often higher within volunteer positions, such as friendships. The VSI was developed after extensive review of existing measures of paid and non-paid job satisfaction indices. Five factors were initially hypothesized to be the most influential in determining job satisfaction: communication quality, work assignment, participation efficacy, support, and group integration. In the end the factors were reorganized into four dimensions of the VSI:

- *Organizational support* through volunteer satisfaction with communication, support mechanisms, and volunteer/staff relationships.
- *Efficacy* based on satisfaction with work assignments, opportunities, and perceived work effectiveness.
- *Empowerment* through the ability to use one's skills, access information, and flexibility in volunteer activities.
- *Integration* into organization through formation of relationships with other volunteers.

The two major factors found to influence volunteer intent to remain were participation efficacy and group integration. As will be seen below, these elements have been linked to environmental volunteer satisfaction and retention. The Galindo-Kuhn and Guzley (2001) study did not find organizational support to be predictive of volunteer intent to remain, as was found in other research, except for among those respondents less than 40 years old. However, the study did indicate that a possible explanation for the lack of correlation

between organizational support and intent to remain was the fact that most volunteers were mothers who had a daughter who benefited from her involvement. In this case, the perceived benefits received by the daughter likely outweighed any dissatisfactions with organizational support. Empowerment was also found to influence satisfaction but not intent to remain.

Research on volunteer management conducted by Hager and Brudney (2004, 2005) could fill in management gaps missing from the VSI. Using a list of common volunteer management practices, Hager and Brudney compared the adoption of eight volunteer management practices with the reported rate of volunteer retention. Recognition activities, training, professional development opportunities, and screening volunteers to match them to tasks were found to be the most influential in improving volunteer retention. Against what would normally be expected, organizations with regular supervision and communication had lower retention rates. It is possible, however, that supervision and communication were being used as a response to low retention rates (Hager & Brudney, 2004). Hager and Brudney looked at a wide range of volunteer organizations, with environmental organizations accounting for only a small portion of the total.

2.7.1 Environmental volunteers

Satisfaction among environmental volunteers has most commonly been found to stem from a sense of efficacy and importance of the volunteer work. Other factors impacting satisfaction among long term volunteers include developing social ties within organizations, the relationship between environmental volunteers and organizers/managers, and having the opportunity to learn and apply new skills.

A study on volunteer retention in environmental stewardship organizations found that long term stewardship volunteers to be highly motivated by a desire to help the environment, meet new people with similar values, and learn about nature (Ryan et al., 2001). Most significant to volunteer retention and long term participation, however,

were good leadership, project organization, clear expectations and feeling needed (much like efficacy identified in previous research). Two important factors did not increase volunteer retention. The importance of learning as a motivator was negatively related to retention. Likewise, a desire to help the environment, or achieve peace of mind was not significant in determining long term volunteer retention. This could be because a desire to help the environment and find peace of mind can be achieved through other actions apart from volunteering. Manzo and Weinstein (1987), and Martinez and McMullin (2004) found that concern for environmental conservation was a common factor among Sierra Club members and Appalachian Trail Conference members, members who actively volunteered were essentially motivated by the perceived efficacy of their work and social connections within the organizations.

A study of a stewardship task force looked both at what motivated active volunteers, and what discouraged minimally active volunteers (Donald, 1997). Active volunteer motivation was much like volunteers in previous studies. They had developed friendships with other volunteers, they found that their work was effective, and they enjoyed volunteering. A small exception was found where some active volunteers stayed because they were worried about the future of the task force and they wanted to influence its direction. This study was able to capture a range of reasons why people did not volunteer more often. Time commitments and personal matters were the two major reasons given, however, 40% felt there was lack of volunteer management/co-ordination. Lack of support and encouragement was also listed by 22% of respondents. Finally, lack of information, lack of social connections, physical inability, distance from worksite, and event timing were occasionally mentioned. While organizations cannot influence the time individuals need to devote to their paid work or personal matters, most of the other reasons given for lack of participation could be addressed through the implementation of better volunteer management practices that focus on creating opportunities that support autonomy, relatedness and competence and match volunteer motivation.

The literature on environment and conservation volunteer satisfaction clearly indicates that a feeling of effectiveness is essential for continued volunteer activity. While it can sometimes be hard to show timely tangible results of certain types of environmental protection directed activities (for example lobbying though letter writing campaigns) it is important that organizations find ways of impressing the importance of conservation actions on volunteers. This need for effectiveness can also be used as a cautionary warning not to create filler jobs to occupy volunteers that have little meaning as this may dissuade a volunteer from offering services in the future. Also, much like social services organizations, presenting opportunities for members to create ties within an organization can increase member participation and sense of belonging which has been identified as an important motivation within environmental volunteers.

2.7.2 Discontinuance of service.

Organizations cannot expect to be able to meet every need and motive of their volunteers. Over time life events and changes will affect a volunteer's ability to continue on. Family commitments, employment opportunities, and personal health can all contribute to the retirement of a volunteer. Adaptations may be possible, such as changing a volunteer's role to better fit their new time schedule or energy levels. In the end, however, volunteer turn-over is inevitable. A successful volunteer relationship will have benefited the organization and will end with volunteers who leave satisfied with their experience.

2.8 Discussion

Volunteerism is an integral part of Canadian society with 46% of the Canadian population engaging in volunteer activities (Hall et al., 2009). The work of volunteers is essential to the communities and organizations to which they contribute; however, while they freely give their time, using volunteers does not come without costs. From the initial stage of recruiting and training volunteers to regular coordination and recognition, maintaining a successful volunteer program requires time and effort. When allocating

scarce resources, an organization needs to consider the costs and benefits of using volunteers in order to ensure their efforts would not be better used elsewhere. By improving volunteer satisfaction and by increasing volunteer retention, research has suggested that organizations will save money through reduced volunteer turnover.

This review has brought together three separate streams of the volunteer retention literature that contribute to improving volunteer retention. The VLC has been used to understand the evolution of a volunteer's time of service. When the volunteer retention literature is applied to the life cycle model key intervention points can be identified and used for planning and improving volunteer programs. Three stages within the VLC were identified as being important to volunteer retention. At the beginning it is important for volunteer work to meet a volunteer's initial motive for volunteering. Throughout their time of service, volunteers need to be satisfied with their volunteer opportunities, such as the type of work they are given to do and the social atmosphere within the organization. Finally, the coordinating and management abilities of the organization are important to establishing long term commitment. For example, the methods used to recognize volunteers will affect how volunteers identify with their work and feel needed within the organization. In a conservation context, several similarities were shown to exist between environmental volunteers and other volunteers. Environmental volunteers, however, seem to have a major emphasis on the importance of effectiveness and need for recognition.

Volunteer motives change over time and are not constant between organizations, or even between volunteers within one organization. The belief that volunteering is an altruistic activity of giving without benefit is no longer valid. All volunteers have their own unique set of reasons for volunteering that need to be met in order for them to be satisfied and remain long term. Volunteerism needs to be recognized as a reciprocal relationship where volunteer and organization needs are being met. The volunteer literature has attempted to address benefits to volunteers, but often it is heavily based on extrinsic motivation and volunteer benefits as rewards, rather than on intrinsic motives and intangible benefits. Intrinsic benefits, such as friendships and feelings of accomplishment, form the strongest bonds to an organization and have been shown to foster long term commitment. The VFI

(Clary et al. 1998) is a good initial assessment tool to identify volunteer motivation but adaptations need to be made to account for intrinsic motivations and environmental values when used in the context of environmental conservation volunteerism.

Understanding and improving volunteer satisfaction requires improved communication methods. An adaptation of the VSI (Galindo-Khun & Guzley, 2001) could become a useful method of getting feedback from volunteers on a semi-regular basis in order to review volunteer programs. Being in touch with volunteers can help organizations to identify early on when a volunteer may need a change such as an increase in responsibilities or a reduction in responsibilities to avoid volunteer burnout. This can also help foster feelings of relatedness and connection to the organization if volunteers recognize that an effort is being made to address their needs as well. Finally, the effective use of volunteers has been shown to require more than recruiting and placing people to reap the benefit of their labour. Overall, volunteers need to feel confident that they are not wasting their time by volunteering.

The reality of the magnitude of global environmental change is causing individuals to become increasingly concerned. As people begin to move beyond engaging in basic environmentally beneficial behaviours, they will search for ways to more actively take part in environmental conservation. Developing our understanding of volunteer motivation, satisfaction and retention will greatly help organizations to create volunteer positions that attract volunteers and increase volunteer retention rates. Increased volunteer retention rates will allow organizations to better utilize scarce resources for important conservation activities. Also, as volunteer programs increase in success, they may even be able to expand and involve more volunteers in a wider variety of tasks.

3.0 Data collection and analysis

Social scientists have developed a range of methods and tools to gain insight into volunteer motivation. This chapter will first describe the strengths and weaknesses of various quantitative and qualitative approaches used to study volunteerism followed by a detailed description of the research design. The primary research instrument used was a quantitative survey of environmental volunteers including a selection of open ended questions to provide depth and qualitative data. A semi-structured questionnaire with a mix of quantitative and qualitative questions was administered during in person interviews with 10 environmental organizations in Victoria, British Columbia, Canada. Justification for the methods and a description of statistical procedures used to analyse the research data are included below.

3.1 Methodology

The complex nature of human motivation and satisfaction has allowed social scientists to explore volunteerism using a range of qualitative and quantitative techniques. For example, qualitative methods such as focus group interviews and in-depth interviews with volunteers have been used to gain an in-depth understanding of the volunteer experience (e.g. Bussell & Forbes, 2003; Halpenny & Caissie, 2003; Yeung, 2004). The use of focus groups and in-depth interviews provide valuable descriptive insights on human values and motivations (Kraus & Allen, 1998) that allow for interpretation and grounded theory development. However, the potential for researcher bias in qualitative research can call into question the reliability and validity of data (Kraus & Allen, 1998). Qualitative research can be limited by the time required to conduct and analyze interviews thereby potentially restricting sample size. Small sample sizes may diminish the generalizability and transferability of results.

Empirical quantitative methods through the use of questionnaire surveys are also used to study human motivation and satisfaction (Mitra & Lankford, 1999). Quantitative surveys

with closed answer questions, such as multiple option answers and Likert-style scales, are useful for testing theories. The ease of sampling large numbers of volunteers using surveys, compared to conducting interviews, gives surveys a greater ability to provide a representative view of volunteer motives, needs and satisfaction than qualitative methods (Donald, 1997; Martinez & McMullin, 2004). Survey data also lends itself to statistical comparisons, whereby inferences can be made about relationships between different variables (Kraus & Allen, 1998). However, according to Allison, Okun, & Dutridge (2002) challenges posed by survey research include the following: participant recruitment and the difficulty of achieving high participant response rates; the inability to verify accuracy and honesty of survey responses; and the ability to have incomplete research results as a consequence of having created the survey based on an incomplete list of possible motives for volunteering.

The present study attempts to gain a broad understanding of environmental volunteer motivation, satisfaction and retention by looking at the volunteer experience from both the volunteer's perspective and the perspective of environmental organizations. The combination of the volunteer perspective and the organization perspective on volunteering will provide insight into the challenges of efficiently maintaining and using volunteers for the benefit of the environment. A multi-method approach that combines quantitative and qualitative methods was chosen. This combines the benefits of the ability to statistically analyze survey responses while gaining insight into volunteer responses through qualitative open ended questions (Kraus & Allen, 1998).

3.2 Selection of environmental organizations

The Victoria Capital Regional District (CRD) is home to over two dozen environmental organizations, each with its own focus and approach. The member list from Volunteer Victoria, a local nonprofit agency that aims to promote and support volunteer initiatives within the city, was used to create an initial list of 14 local environmental organizations that actively use volunteers. Of these 14, six were not included in the research project for

reasons described below and two other organizations that met selection criteria were added to ensure that a full range of organization types were included in the study.

Prior research has found that volunteers sometimes relate differently to paid leaders compared to voluntary leaders (Snow, 1992). Therefore, for the purposes of this research, it was decided that participating organizations should have at least one paid staff member who would primarily organize volunteers. This would ensure consistency among groups. As a result one Volunteer Victoria organization was removed from the list.

Initially, this study intended to include a section of research based on participatory observation. It was hoped that participatory observation would help to clarify and provide context to volunteer responses within the volunteer questionnaire. By volunteering, the researcher could experience the milieu in which volunteers were working in order to better understand factors affecting volunteer satisfaction and dissatisfaction. In the end participatory observation was not found to be essential to the research results, however, the initial intent resulted in organizations being selected based on the researcher's ability to spend some time volunteering with each organization. One organization was removed from the list due to the extensive training and time commitment required by the organization. Time spent as a volunteer with participating organizations is unlikely to bias results as the research questions were based on previous research and qualitative data analysis aimed to present the wide range of responses given by participants.

Participant anonymity is important when asking people to share personal feelings and opinions. In order to protect the anonymity of respondents, and to encourage individuals to give honest answers, organizations were asked if they thought that at least 10 of their volunteers would be willing and able to complete the volunteer survey. Four organizations from the Volunteer Victoria list either did not have at least 10 volunteers or did not feel that they had sufficient volunteers to participate in the study.

The remaining eight organizations from the Volunteer Victoria member list were contacted in person or by phone and agreed to participate in the study by allowing

recruitment of their volunteers for the volunteer survey, and by participating in an interview about their volunteer program. Two additional environmental organizations dependent on volunteers were added to the study based on their environmental focus in order to ensure that a full range aquatic, terrestrial, conservation and general environmental issues were included in the study. In total 10 environmental organizations participated in both the volunteer surveys and the organization interview.

3.3 Volunteer survey design and implementation

Traditionally, mail surveys, telephone interviews, face-to-face interviews, and drop-off surveys (Salant & Dillman, 1994) have been used to collect questionnaire data with email and internet surveys becoming available in recent years (Fowler, 1993). Telephone interviews were not feasible for this study because confidentiality prevents personal contact information to be obtained from organizations. A combination of drop-off, mail surveys and internet surveys was used to maximize response rates and attempt to include hard to reach volunteers.

In total, 150 surveys were used for analysis in this study with 25 from past, 99 from present and 25 from temporarily inactive volunteers and one whose status is unknown. The ten organizations initially recruited to participate in the study are represented by 142 surveys. The number of surveys received from volunteers with each organization ranged from 3 to 41 surveys. Eight surveys, four electronic and four paper, were returned from seven organizations not initially included for recruitment in the study.

Drop-Off Surveys

Drop-off surveys require the researcher to deliver the survey to potential participants in person with the survey to be returned at a later date. Personal contact between the researcher and the participant is believed to increase the likelihood that the survey will be completed and returned (Salant & Dillman, 1994). As well, participant interest and response rates are found to increase when questionnaires are designed in an attractive booklet format with clear and simple formatting.

A challenge of drop-off surveys is the time and effort required to come into contact with the desired survey participants. For this study an email was sent by the participating organizations to their past and present volunteer email list to inform volunteers of the research project. Paper copies of the questionnaire were left with volunteer coordinators of seven of the participating organizations where volunteers regularly come in contact with volunteer coordinators. Volunteers were invited to complete a copy during their next volunteer shift. When possible, the researcher attempted to distribute the survey in person to volunteers during volunteer activities, recognition events, and organization events where volunteers would be present. In person distribution of the surveys was successful and resulted in about a 90% response rate from volunteers approached to participate. The success rate of volunteer coordinators asking volunteers to participate is unknown. Three organizations did not receive paper surveys due to limited contact with volunteers or due to limited volunteer activities during the recruitment period. Four paper surveys were completed by volunteers for environmental organizations not directly recruited as part of this study.

Mail Surveys

A random distribution of surveys by mail was not possible because personal contact information could not be provided by the organizations. In an attempt to reach volunteers who do not see the volunteer coordinator, as well as past and temporarily inactive volunteers, the email sent to volunteers by the organizations also invited volunteers to request a survey to be sent to them by mail if desired. A major weakness of mail surveys is potential survey bias because individuals directly interested in the research topic are more likely to participate than those who are not (Salant & Dillman, 1994). Email recruitment resulted in 13 responses from individuals with 12 agreeing to provide their home address to receive the survey by mail. All 12 individuals returned their surveys, the 13th respondent did not wish to share his home address and declined to participate or may have received a survey in person from the volunteer organization.

Online Surveys

In order to increase the number of surveys collected, an online version of the volunteer questionnaire was created three months into distributing surveys. The online survey contained the same questions as the paper version. A second email was sent out by the organizations that distributed paper surveys with a brief description of the research and a link to the research website where volunteers could access the online version of the survey. The research website included a description of the research goals and ethics information that ensured volunteers of the confidentiality of their research participation. Having an online version of the questionnaire was essential in increasing participation rates from hard to reach and past volunteers. Several organizations have seasonal volunteer positions and independent volunteer activities which made direct contact with those volunteers unlikely. The online questionnaire allowed interested volunteers to gain more information and to access the survey without having to give personal information to the researcher.

Having an online survey allowed two organizations with limited volunteer activity during the recruitment period to reach their volunteers. The electronic version also encouraged one organization to join the study, after it had initially declined. The organization felt that collecting surveys from volunteers would be too difficult as none of them reported to a single office. Electronic surveys were completed by volunteers from seven participating organizations, three of which exclusively recruited volunteer participants for the electronic version.

The electronic survey was successful in encouraging survey participation, however, the number of incomplete surveys and missing responses to questions was higher than with paper surveys. Most paper survey respondents replied to almost all the questions with only two respondents leaving out entire sections of the survey. A total of 83 electronic surveys were started. Of these, 10 did not get past the question “This is the first and only time I have completed this questionnaire,” which was the only mandatory question for survey respondents. It is possible that these individuals wished to view all the questions before responding to the survey. The second time the respondent viewed to give

responses the survey would have been recorded as a new survey. Three surveys had up to five questions completed which was not sufficient to keep the surveys for analysis.

A final attempt at recruiting volunteers from any environmental organization in the CRD was made by putting up posters at the University of Victoria campus and at grocery stores and community bulletin boards with a link to the research website. A small classified add was also put in a local environmental newsletter and through a posting on the Victoria Craigslist website (http://victoria.craigslist.ca). This attempt at recruiting volunteers resulted in the completion of four electronic surveys from individuals with environmental organizations other than the ones actively participating in the study. It is unknown if any volunteers from participating organizations were recruited through these alternative recruitment methods.

In total 70 electronic surveys were kept for analysis, 34 from the three electronic only organizations, 32 from the four other participating organizations which also used paper surveys, and four from other environmental organizations that did not actively recruit their volunteers for participation in this study. Three organizations did not have any electronic surveys completed. Of the 70 electronic surveys, 8 were not entirely complete but sufficient responses were given to some of the major sections to warrant at least partial data analysis (for example motivation responses but not satisfaction responses.)

3.3.1 Volunteer questionnaire

After completing a review of volunteer retention literature, a ten page structured questionnaire was developed using Likert-type scale, multiple selection and open ended questions. The questionnaire was divided into five sections in order to learn about specific aspects of the volunteer experience which have been shown to contribute to volunteer retention:

(1) Descriptive information about volunteer activities
(2) Initial motivation for volunteering
(3) Satisfaction with the volunteer experience

(4) Barriers that reduce or prevent volunteering
(5) Demographic information about the volunteer

Several versions of the volunteer questionnaire were considered. Initially two different questionnaires were created, one for past volunteers and one for present volunteer. While the questions were mostly the same, the questions were worded in past or present tense. Three past and two present volunteers from four of the participating organizations participated in a pilot study of the questionnaires. The volunteers were informed that they were testing the surveys and that the researcher would go over their answers with them after they completed the questionnaire on their own. It was decided that having two versions of the questionnaire was not necessary or suitable because it would be difficult to ensure volunteers completed the proper version of the questionnaire. Feedback from the pilot study ensured that the questions were easy to understand. When asked if changing the wording to be temporally neutral (neither past nor present tense) the participants did not feel that it would affect their understanding of the questions or their answers. Two questions that were different between the past and present versions of the survey were included in the combined version and were clearly labelled as being meant for past or present volunteers. Data from the pilot study were included in the final study.

3.3.2 Section 1: Volunteer profile

The first section of the survey was used to learn about the relationship between volunteers and their individual environmental organization. Respondents were asked to indicate which organization they volunteer for, whether they are active, temporarily inactive or no longer volunteer for the organization (Q.1) and their length of volunteer service with the organization (Q.2). The following questions aimed to gather descriptive information about volunteer role(s). Question three asked about volunteer time commitment(s) and question five allowed respondents to indicate the different types of volunteer work they performed in the organization. Two questions in this section aimed to determine the level of commitment between the volunteer and the organization.

Respondents were given the opportunity to self rate their volunteer involvement on a scale from minimally active to very active (Q.4). Knowing whether or not a volunteer is a member of an organization, and when they became a member (Q.6), was useful in assessing an individual's commitment to their organization. The answers to these questions have been useful when categorizing and comparing volunteers.

3.3.3 Section 2: Volunteer motivation

The second section of the questionnaire focused on the possible motives which lead people to begin volunteering. Question seven consisted of a list of 35 statements of potential reasons why people begin volunteering with environmental organizations. The list adapted statements from the Volunteer Function Index created by Clary et al. (1998) to fit an environmental context. Supplementary statements were derived from Galindo-Kuhn and Guzley (2001) and studies specific to environment and conservation volunteers by Donald (1997); Martinez and McMullin (2004); Ryan et al. (2001); and Kidd et al. (1996). The statements were initially thought to represent seven different factor groupings: Altruism/Values; Ego/Protective; Push Social; Pull Social; Career Learning; Other Learning; and Empowerment. These groupings are based on Clary et al.'s (1998) five factor groups: understanding, social career, protective, and enhancement. Social was broken into separate categories based on social coercion (push) such as to make others happy and social attractions (pull) such as the ability to make new friends. Altruism/Values was added to include statements related to environmental beliefs which may lead people to volunteer. Respondents were asked to assess the relative importance of each statement to their decision to volunteer using a five point Likert-type scale (1=not at all important, 5=extremely important). Likert-type scale questions are easier to respond to than open ended questions. They are also a useful way to quantify human feelings in a way that is comparable between respondents and which lends to statistical analysis of the data.

Question eight was an open ended question that allowed respondents to describe the most important reason why they chose to volunteer with the environmental organization. The open ended question was an opportunity for respondents to highlight why they began volunteering and to include their reason if it was missing from the list of 35 possible motives.

3.3.4 Section 3: Volunteer satisfaction

The third section of the questionnaire focused on respondent satisfaction with their volunteer experience. Question nine consisted of twelve statements representing possible positive outcomes of volunteering based on the motives for volunteering presented in section two. Volunteers were asked to rate how satisfied they were with the ability of their volunteer experience to fulfill each statement on a five point Likert-style scale (1=Very Dissatisfied, 5=Very satisfied). Question ten aimed to assess how aspects of the environmental organization and the available volunteer opportunities affect volunteer satisfaction. Fifteen items that could affect satisfaction with the volunteer experience were compiled from Galindo-Kuhn and Guzley's (2001) Volunteer Satisfaction Index and from the list of volunteer motivations. Respondents were asked once again to rate their level of satisfaction with each of the listed aspects of their volunteer experience on the same five point Likert-style scale as the previous question.

In order to gain an overall sense of how satisfied respondents were they were asked to rate their satisfaction with their volunteer experience (Q. 11) and how likely they would be to recommend volunteering with the organization to a friend (Q. 12). These questions are meant to situate the importance of satisfaction with individual aspects of the volunteer experience with the overall volunteer experience. Finally, question thirteen was an open ended question that allowed respondents to elaborate on their satisfaction or dissatisfaction with their volunteer experience if they desired.

3.3.5 Section 4: Barriers to volunteering and future volunteering

The fourth section of the questionnaire sought to understand barriers that affect the respondent's ability to volunteer. A list of ten barriers to volunteering with environmental organizations was compiled from studies by Martinez and McMullin (2004) and Donald (1997). Respondents were asked to indicate if each factor was a major, a minor, or not at all a consideration when assessing their willingness and ability to become more active as a volunteer. The list contained specific factors within two types of barriers, the first being

other time commitments and the second being factors related to the volunteer experience. The list of potential barriers was followed by an open ended question (Q. 15) asking respondents if there was anything that the organization could do or change that would encourage or enable the respondent to volunteer more over the next 12 months.

Respondents not currently volunteering were asked how likely it was that they would return in the next 12 months ranging from 1-very unlikely to 5-very likely (Q16). Active volunteers were asked to anticipate if they would volunteer more, less, the same amount, or if they were not sure how much they would volunteer in the next 12 months compared to the past 12 months (Q. 17). Finally, respondents were asked to elaborate on the factors that will keep them from volunteering if they anticipated that they would volunteer less or not at all over the next 12 months (Q. 18). This section of the questionnaire aimed to identify reasons people stop volunteering beyond dissatisfaction with their experience and potential inability to meet their initial motivations for volunteering.

3.3.6 Section 5: Personal information

The final section of the questionnaire asked participants to share information about themselves. Questions included whether or not volunteers also volunteered for other environmental or non-environmental organizations (Q. 19), gender (Q. 20), their employment status (Q. 21), and the highest level of education they had completed (Q. 22). These questions were meant to enable comparison with responses from other volunteer research as well as provide insight into potential motives for or barriers to volunteer participation.

3.3.7 Data collection timeline

- August 2006: Began approaching environmental organizations to participate in study and began paper survey distribution.
- October 2006: Began interviews with participating organizations.
- January 2007: Began collecting electronic volunteer surveys, surveys opened to volunteers beyond 10 participating organizations.
- March 2007: Volunteer survey collection and organization interviews completed.

3.3.8 Sampling limitations

While three different sampling methods were used to recruit study participants, the varied nature of volunteer opportunities presented a number of challenges and limits to reaching volunteers. To begin with, there is no one location or time where one can approach volunteers. Some volunteer opportunities have flexible locations and schedules that allow them to volunteer without having to come in contact with the volunteer coordinator or organization office. Other volunteer opportunities are seasonal and did not occur during the study time period. The use of email did help to access these hard to reach volunteers. Email fatigue, however, may have caused some potential participants to disregard the study invitation email since they were not anticipating contact from the organization. As well, one organization commented that they have a group of volunteers that are not regular internet users. As a result, this group in particular could only be reached if they happened to come in contact with their volunteer coordinator or the researcher at a volunteer event.

Past volunteers were the hardest group to reach, which is reflected in their survey sample size. A few past volunteers were reached by attending organization events that were not limited to volunteer attendance. Those organizations with old volunteer lists were willing to send out an invitation email to their old list and some past and temporarily inactive volunteers continue to receive regular email notices. Participation from this group of

volunteers is entirely dependent on them actually opening their email and being willing to complete the survey.

The above challenges in recruiting survey participants could potentially exclude some volunteers from accessing and participating in the study. The wide variety of methods used to recruit survey participants is believed to have addressed the barriers to participation and was able to include volunteers from a wide range of backgrounds and volunteer interests.

It is important to note that volunteers were specifically recruited from organizations with at least one paid staff member. As such, volunteers for entirely volunteer run and administered organizations are not represented in this study.

3.4 Organization interview design and implementation

In order to gain some insight into the environmental organization perspective on volunteering personal interviews were conducted with ten organizations in the Capital Regional District. For each organization the interview participant was in charge of, or worked regularly with volunteers. Semi-structured interviews were chosen because they allow a common set of questions to be asked of each organization while also allowing flexibility to ensure that the unique circumstances of each organization were able to be documented. The semi-structured interviews consisted of three parts. A data collection section with specific short answer questions aimed to gather statistical data regarding the organization, a structured Likert-style set of questions and a set of open ended questions to allow for detailed descriptions and elaboration on the responses given in the previous two sections.

3.4.1 Section 1: Organization data.

The first section of the interviews aimed to gather specific information about each organization and their volunteer program. Each organization was asked if they had a designated volunteer manager, how many active volunteers they reported having the previous year, and the total number of volunteer hours completed by volunteers the previous year. The volunteer manager was also asked to divide the volunteer hours into activity categories. This information allows the organizations to be categorized by the size of their volunteer program and the range of volunteer opportunities they offer.

3.4.2 Section 2: Management Practices

The second part of the organization survey consists of Likert-style questions relating to the organization's volunteer management practices and cost/benefit of volunteer use. The question components were taken from Hager and Brudney (2004, 2005) and serve to assess the range of practices used by environmental organizations. The results of these

questions can also be used to compare environmental organizations to the range of volunteer organizations studied by Hager and Brudney (2004, 2005).

The first set of questions asked respondents to indicate the degree (large, some or not at all) with which the environmental organization implements specific volunteer management practices. Respondents were then asked to rate whether potential benefits of using volunteers, such as cost savings and quality of services, actually provided great, moderate or no benefits to the organization. Finally, respondents were asked to rate whether specific issues were big, small or not at all problems within their organization. One item, "Having more volunteers than organization can accommodate" (Hager & Brudney, 2005, pg. 28) was replaced by "Recruiting long term volunteers" based on initial casual discussion with the organizations and an indication that too many volunteers was not an issue. As well specific wording of some items was adapted to fit environmental organizations rather than social services organizations.

3.4.3 Section 3: Management Challenges and Strategies

The final section of questions consisted of open ended questions to elaborate on the responses given to the Likert-style response scales and to gain a better understanding of how volunteers are integrated into the organizations. Interview respondents were asked why volunteers are used for specific tasks and the organization's main reason for using volunteers. The opportunity was given for respondents to indicate why certain management practices were, or were not, being adopted. As well, during the interview questions were asked about the challenges presented by using volunteers and strategies for overcoming these challenges. Finally, the interview was left open for discussion on any further issues related to volunteers deemed important by interview participants.

4.0 Results

4.1 Environmental Volunteers in the Capital Regional District

The first section of this chapter presents the results of a volunteer questionnaire survey that was completed by active and inactive volunteers with environmental organizations in the Victoria Capital Regional District between September 2006 and February 2007. A paper format of the questionnaire was administered in person and by mail to volunteers. An electronic version of the questionnaire was also used to allow volunteers to participate who were recruited by email. The use of a paper and electronic questionnaire format resulted in the completion and return of 80 paper questionnaires and 70 useable electronic questionnaires. A questionnaire was considered useable for quantitative analysis if questions were answered at least until the end of question 7 as question 7 responses were used to identify motivation factors. One paper survey was partially complete with only the open ended questions answered. As these answers were still considered valuable for qualitative analysis the survey was kept but only 149 surveys were used for quantitative analysis related to motivation, satisfaction and barriers to volunteering. In total, 150 useable questionnaires were included in the qualitative analysis.

The results of the volunteer survey are presented in four sections which correspond to factors that affect the volunteer experience and can contribute to volunteer retention:

- Volunteer profile
- Volunteer motivation
- Volunteer satisfaction
- Barriers to volunteering

Volunteer motivation relates to the first stage of the VLC. Volunteer satisfaction and barriers to volunteering contribute to volunteers accepting an opportunity (stage 2), engaging in an opportunity (stage 3), and decision to continue or discontinue volunteering (stage 4) based on personal satisfaction or barriers preventing ongoing service. Quantitative results and analysis are presented in combination with qualitative

observations and quotations from open ended questions in order to support and bring greater understanding to the quantitative results.

4.1.1 Volunteer Profile

The first and last page (Questions 1-6 and 19-22) of the volunteer survey asked a series of questions related to demographics and volunteer activity. A profile of responding environmental volunteers in the CRD is presented in Table 4.1. A greater portion of respondents were female (*n*= 83, 55.3%) than male (*n*=56, 37.3%). Respondents come from quite a range of different employment categories with 44 employed full time (29.3%), 15 part time (10.0%), and 38 retired (25.3%). Students made up 21.3% of the sample (*n*=32) and nine people were unemployed (6.0%). Two people were homemakers (1.3%).

The education level of respondents was high with 62.0% having completed some form of higher education degree or certificate. Thirty-seven respondents had completed some college or university (24.7%) and 10 respondents (6.7%) had completed their high school education.

Table 4.1 Respondent gender (Q20), Employment status (Q21), and Level of education (Q22)

Response	**n**	**%**
Gender (Q20)		
Male	56	37.3
Female	83	55.3
No response	11	7.3
Total	150	100.0
Employment status (Q21)		
Unemployed	9	6.0
Employed part time	15	10.0
Employed full time	44	29.3
Student	32	21.3
Retired	38	25.3
Homemaker	2	1.3
No response	10	6.7
Total	150	100.0
Highest level of education completed (Q22)		
High school	10	6.7
Some college or university	37	24.7
Completed a college diploma/certificate	9	6.0
Undergraduate degree completed	49	32.7
Graduate degree completed	35	23.3
No response	10	6.7
Total	150	100.0

n=150

Table 4.2 presents the results of questions regarding respondents' volunteer relationship with their organization. In order to differentiate between past and present volunteers, respondents were asked to identify their volunteer status. The majority of respondents consider themselves to be active volunteers (*n*=99, 66.0%) meaning they regularly engaged in or were available to engage in volunteer activities. An equal number of respondents were temporarily inactive (*n*=25, 16.7%) and no longer active volunteers (*n*=25, 16.7%). Just over a third of respondents had volunteered for their organization for less than a year (*n*=52, 34.9%), 42.7% volunteered between one and four years (*n*=64) and 22.8% volunteered for over four years (*n*=34).

A majority of respondents became members when they began volunteering (*n*=41, 28.0%), after they began volunteering (*n*=33, 22.0%), or were members of their organizations before they began volunteering (*n*=13, 8.7%). Volunteering, however, did not guarantee respondents would become members of their organization as 36 respondents are not members (24.0%) and 23 respondents' organizations do not operate with a membership system (15.3%).

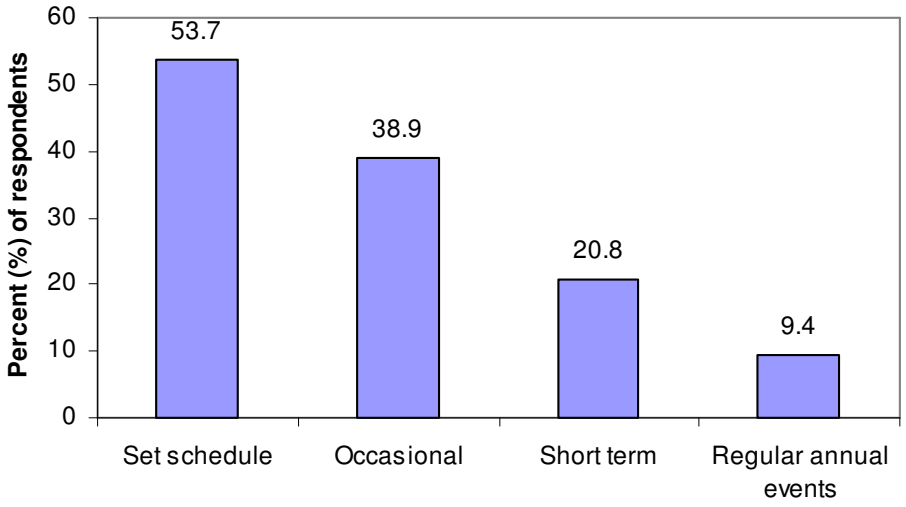
Table 4.2 Volunteer status (Q1), Length of service (Q2), and Membership status (Q6)

Response	n	%
Volunteer status (Q1)		
Active volunteer	99	66.0
Temporarily inactive volunteer	25	16.7
No longer volunteer	25	16.7
Total (missing cases, *n*=1)	150	100.0
Length of service (Q2)		
Less than one year	52	34.7
Between one and two years	33	22.0
Between two and three years	16	10.7
Between three and four years	15	10.0
More than four years	34	22.7
Total	150	100.0
Membership status (Q6)		
The organization does not have members	23	15.3
Is not a member of the organization	36	24.0
Was a member of the organization before becoming a volunteer	13	8.7
Volunteered for the organization before becoming a member	33	22.0
Became a member when he/she began volunteering	42	28.0
Total (missing cases, *n*=3)	150	100.0

n=150

In order to determine the time commitments undertaken by volunteers, respondents were asked to identify which type of time commitment best described their time as a volunteer with the organization (Figure 4.1). Volunteers were allowed multiple responses to accommodate for changes over time and the possibility that they were engaged in several different types of volunteer roles. The majority of volunteers (53.7%) volunteered on a set schedule over a long period of time. Volunteer activities lending to casual or on call volunteering, such as community clean up days or staffing outreach tables at community events, attracted 38.9 % individuals who volunteered occasionally as needed. Specific fundraising events or one time projects that require a short term commitment of up to six months were undertaken by 20.8% of volunteers. Volunteering regularly at annual events, such as plant sales, which volunteers can knowingly plan for year after year was reported by 9.4% of respondents.

Figure 4.1 Volunteer time commitment and participation (Q3) (One missing case excluded, total *n*=150)



Respondents were asked to indicate which different activities they had engaged in while volunteering for their environmental organizations. Eight different types of volunteer activities were listed and space was provided for volunteers to include activities not included in the list. Sixteen other volunteer activities were added to the other category. Descriptive results are presented in Table 4.3 and are ranked from most frequently indicated activity to least frequently indicated. Community outreach and education is listed as the most frequently engaged in volunteer activity among respondents (*n*=59, 39.3%) with short term event assistant (*n*=55, 36.7%) and field work (*n*=50, 33.3%) following closely behind.

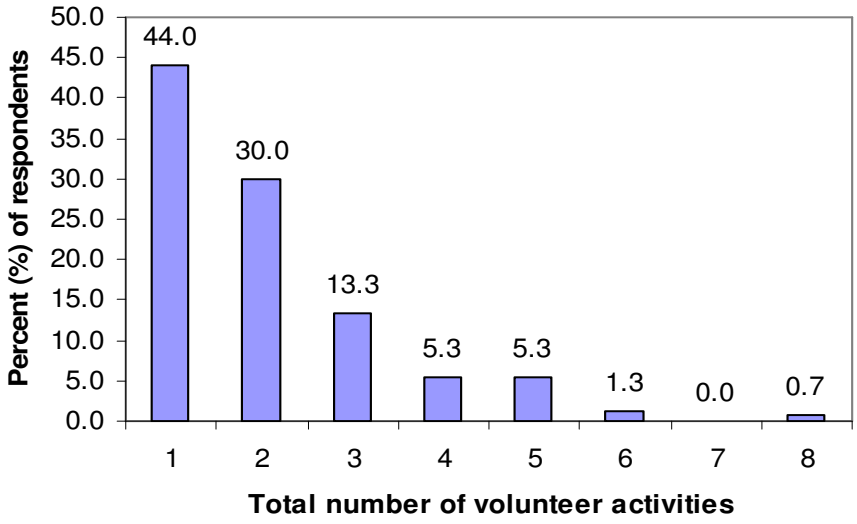
Table 4.3 Type of volunteer activity (Q5)*

Activity	**n**	**%**
Community outreach/education	59	39.3
Short term event assistant	55	36.7
Conservation or restoration field work	50	33.3
Regular administrative support	26	17.3
Research and monitoring	24	16.0
Event organization/leadership	20	13.3
Occasional administrative support	19	12.7
Non-event fundraising	8	5.3
Other		
Grounds maintenance	13	8.7
Advertising, outreach	12	8.0
Board member	4	2.7
Technical support	4	2.7
Fruit picking	3	2.0
Gate keeper	3	2.0
Park warden	3	2.0
Preparation of outreach material	3	2.0
Sales assistant	3	2.0
Campaign advocacy	2	1.3
Volunteer supervision/management	2	1.3
Advocate for meaningful action	1	0.7
Garden steward	1	0.7
Lab assistant	1	0.7
Volunteer recruitment	1	0.7
Write articles	1	0.7

* Totals do not equal 100% due to multiple responses, *n*=150

The number of different volunteer activities engaged in by volunteers ranged from one to eight (Figure 4.2). The largest portion of volunteers (44.0%, *n*=150) engaged in only one volunteer activity while the mean number of activities per volunteer was 2.05. Just over one quarter (25.9%) of respondents participated in for three or more different volunteer activities.

Figure 4.2 Reported number of volunteer activities undertaken by respondents (*n*=150)

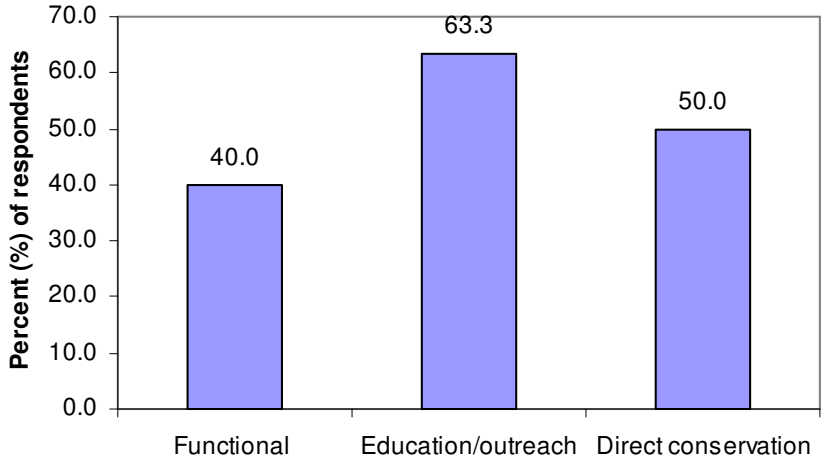


Volunteer activities were organized into three roles according to the activities performed (Table 4.4, Figure 4.3). The three roles identified were functional, outreach/education, and direct conservation. The functional role (40% of respondents) contains activities that are required for the day to day functioning of the organization. Most often these are office activities that require minimal contact with the public. Writing articles and preparing outreach material could arguably fit into the functional role or education/outreach role. They were placed in the functional role because they are office-style activities required in order for outreach to take place. Education/outreach activities involve volunteers directly interacting with the public for educational purposes. Respondents most commonly volunteered in the education and outreach role (63.3%). Direct conservation includes activities where volunteers are most often outdoors directly impacting the health of the local environment. This includes restoration activities, research and monitoring, and acting as park wardens which requires volunteers to observe and report human and environmental hazards within local parks. Park wardens are not listed as a functional role because they directly interact with nature, and sometimes the public. They support but do not replace paid park wardens.

Table 4.4 Volunteer roles

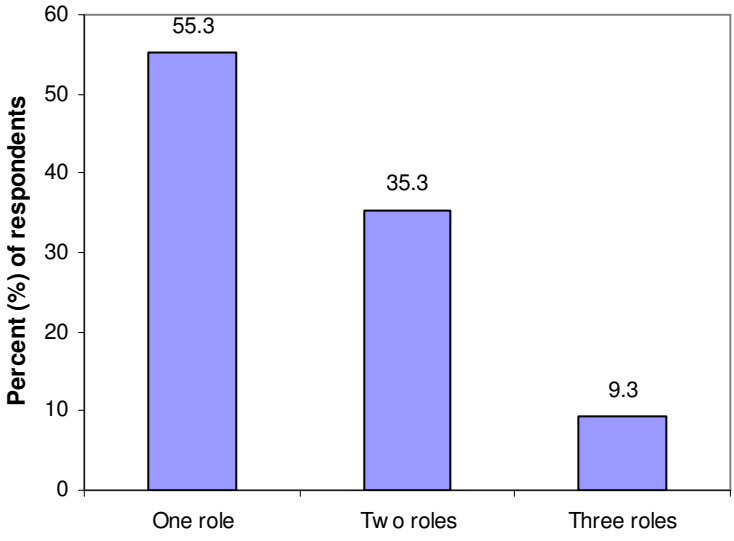
Functional
- Regular administration - Occasional administration - Fundraising - Board of directors - Maintenance - Volunteer management - Gate keeper - Write articles - Sales assistant - Technical support - Preparation of outreach material
Outreach/education
- Education program worker - Event assistant - Event organization - Advertising/outreach - Volunteer recruitment - Advocate for meaningful action - Campaign advocacy
Direct conservation
- Restoration - Research/monitoring - Fruit picking - Park/property warden - Garden steward

Figure 4.3 Volunteer participation in specific volunteer roles (*n*=150, participants could undertake >1)



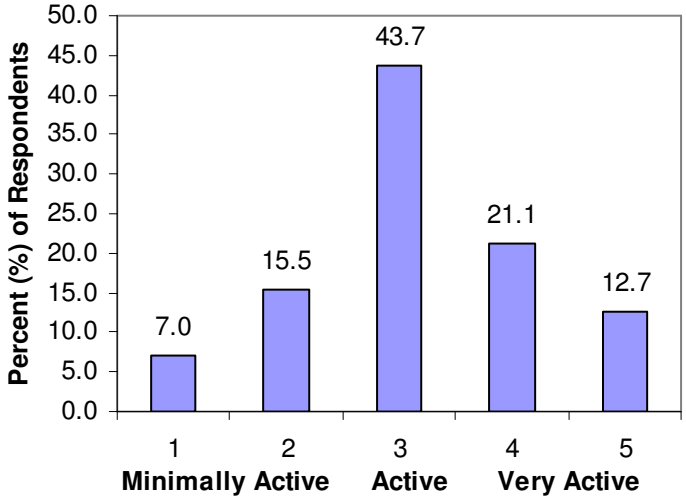
Most respondents (55.3%) engaged in activities which perform one role within the organization while 35.3% fulfilled two roles, and 9.3% performed all three roles while volunteering (Figure 4.4).

Figure 4.4 Number of volunteer roles undertaken per volunteer



Participants were asked to compare their level of volunteer activity to other people they know (in general) on a scale of 1-5 (where 1= “minimally active”, 3= “active”, 5= “very active”). The majority of volunteers (43.7%) indicated that they were active in the middle of the 1-5 scale (Figure 4.5). This indicates that these individuals believe the amount they volunteer is about on par in comparison to others. Compared to others, 22.5 % feel that they are minimally active (score of 1 or 2) and 33.8% of respondents believe they are very active (score 4 or 5). Respondents were not given the opportunity to elaborate on their response with an open ended question, however, comparison of volunteer activity between one’s self and others may indicate feelings of personal satisfaction or inadequacy.

Figure 4.5 Self reported activity level as a volunteer (Q 4) (*n*=150)



The descriptive results reveal that the surveyed sample of volunteers represents a range of different types of individuals, volunteer frequency, and volunteer roles. These differences are further explored in the following sections of this chapter. Statistical analysis is used to investigate patterns, unique groupings and characteristics that contribute to volunteer motivation, satisfaction, and retention to volunteering. Qualitative analytic coding of open ended questions is used to provide deeper insight into volunteer behaviour whenever possible.

4.1.2 Volunteer Motivation

This section explores the motives that led respondents to begin volunteering. Quantitative results and statistical analysis are presented, followed by analysis of participant open ended response to why they began volunteering.

Thirty-five statements of potential reasons to begin volunteering were complied and adapted from the Volunteer Function Index (Clary et al., 1998) and environmental volunteer motivation literature such as Martinez and McMullin (2004) and Donald (1997). Participants were asked to rate each statement using a Likert-style scale (1= “not at all important”, 2=”slightly important”, 3=”somewhat important”, 4=”very important”, 5=”extremely important”). The mean response score for each statement was used to meaningfully rank the overall importance of each potential reason for volunteering in Table 4.5.

Table 4.5 Volunteer motivation statements frequency of response (Q 7) (*n*=149)

	Response by % of respondents						
Motivational statement	Not at all important 1	Slightly important 2	Somewhat important 3	Very important 4	Extremely important 5	Mean	S.d.
I was genuinely concerned about the environment.	2.7	1.3	9.4	28.9	57.7	4.4	0.9
I thought I could do something for a cause that was important to me.	3.4	3.4	12.8	36.9	43.6	4.1	1.0
I found my volunteer work to be rewarding	0.7	6.0	18.8	41.6	32.9	4.0	0.9
I felt like my volunteer work would make a difference	2.0	5.4	20.1	40.9	31.5	4.0	1.0
I wanted to help the organization.	2.7	2.0	18.1	49.0	28.8	4.0	0.9
I was concerned about the environment for future generations.	6.0	6.0	17.4	34.9	35.6	3.9	1.1
I found volunteer activities enjoyable	2.0	2.0	22.8	54.4	18.8	3.9	0.8
I felt a sense of responsibility towards the environment.	4.0	8.7	23.5	28.9	34.9	3.8	1.1
I wanted to give back to nature.	11.4	11.4	18.8	24.8	33.6	3.6	1.4
Volunteering let me learn things through direct, hands on experience.	7.4	12.2	19.6	36.5	24.3	3.6	1.2
I felt it was important to help others.	6.7	10.7	26.2	39.6	16.8	3.5	1.1
I had knowledge and skills that could be useful to the organization.	6.7	12.1	25.5	41.6	14.1	3.4	1.1
I enjoyed the social aspects of volunteering.	10.1	12.8	26.8	36.2	14.1	3.3	1.2
I thought I would learn more about the cause for which I was volunteering.	8.1	15.4	32.2	30.9	13.4	3.3	1.1
I felt the organization needed me.	14.2	16.9	31.8	29.7	7.4	3.0	1.2
I expected that volunteering to help me feel more hopeful about the future of the environment.	15.4	18.8	28.9	24.8	12.1	3.0	1.2
I thought I would be able to grow as an individual.	18.9	18.2	28.4	25.7	8.8	2.9	1.2
I believed that volunteering would allow me to gain a new perspective on things.	12.8	22.3	31.1	28.4	5.4	2.9	1.1
I could meet new people	23.5	22.1	26.2	19.5	8.7	2.7	1.3
Volunteering gave me peace of mind.	28.2	18.1	27.5	18.8	7.4	2.6	1.3
I wanted to explore my own strengths.	31.5	20.1	22.1	21.5	4.7	2.5	1.3
Volunteering was a way to make new friends.	28.9	26.2	26.8	10.7	7.4	2.4	1.2
Volunteering gave me a chance to reflect.	36.5	17.6	23.0	17.6	5.4	2.4	1.3
I expected to have freedom to decide how to carry out my volunteer assignment.	32.4	27.7	24.3	11.5	4.1	2.3	1.2
I wanted to make new contacts that might help my business or career.	49.7	14.1	15.4	10.1	10.7	2.2	1.4
I thought volunteering could help me to succeed in my chosen profession.	51.0	10.7	16.8	14.1	7.4	2.2	1.4
Volunteering could help me to get my foot in the door at a place where I wanted to work.	52.7	14.9	11.5	12.2	8.8	2.1	1.4
Volunteering allowed me to explore different career options.	50.3	17.4	13.4	10.7	8.1	2.1	1.3
I thought volunteer experience would look good on my résumé.	50.0	14.9	16.2	11.5	7.4	2.1	1.3
I expected volunteering to allow me to work at my own pace.	46.6	20.9	20.9	6.8	4.7	2.0	1.2
I thought volunteering would relieve me of some guilt over my environmental impacts.	57.0	20.8	14.8	4.7	2.7	1.8	1.0
I knew others who volunteer with this organization.	61.1	15.4	10.7	8.7	4.0	1.8	1.2
People I am close to wanted me to volunteer.	71.1	11.4	8.7	6.0	2.7	1.6	1.1
Volunteering was an important activity to people I know best.	65.1	19.5	10.1	2.7	2.7	1.6	1.0
My friends volunteered.	76.5	14.8	5.4	2.7	0.7	1.4	0.8

---- indicates division between statements based on mean score.

Five statements were found to be the most important overall with a mean score of 4.0 or higher. As could be expected from environmental volunteers, the statement "I was genuinely concerned about the environment" had the highest mean score (4.4) and was rated as "very important" (4.0) or "extremely important" (5.0) by 86.6% of respondents and not at all important by only 2.7%. Three of the statements focused on the volunteers' desire to contribute "I thought I could do something for a cause that was important to me," "I wanted to help the organization," and "I felt like my volunteer work would make a difference." Each was rated as "very" or "extremely" important by 80.5%, 77.8%, and 72.4% respectively. The final high ranking statement "I found my volunteer work to be rewarding" was the only high ranking statement that addressed the potential for personal benefits through volunteering.

Among the least reported reasons for volunteering was "I thought volunteering would relieve me of some guilt over my environmental impacts" with only 7.4% of respondents rating it "very" or "extremely" important and 57.0% responding that it was "not at all important" to why they volunteer. The other lowest ranked statements all dealt with social push factors "I knew others who volunteer with this organization," "People I am close to wanted me to volunteer," "Volunteering was an important activity to people I know best" and "My friends volunteered." This indicates that few people are choosing to volunteer because of some social pressure, but are choosing to volunteer because they want to.

4.1.2.1 Volunteer motivation factor analysis

Individual motivation statement scores provide a basic insight into why people begin volunteering. The use of factor analysis allows further exploration into the interrelationships among the 35 variables of potential reasons for volunteering (Gorsuch, 1983). Through factor analysis the variables are meaningfully grouped into a smaller number of factors composed of complementary variables (Thompson, 2004). The creation of a small number of motivation factor groupings has the benefit of combining similar motives while facilitating the ease of further analysis (Thompson, 2004). For

example, analysis of variance tests are more easily managed and result in fewer errors when conducted with a smaller number of variables.

Two types of factor analysis exist: exploratory factor analysis and confirmatory factor analysis. Confirmatory factor analysis requires that researchers have a developed theory that informs their expectations regarding the number of factors, the corresponding variables and the degree of correlation among the factors (Thompson, 2004). The body of volunteer motivation literature that informed this study included the use of factor analysis. As motivation statements were adapted from these studies, it was initially expected that statements would fall into seven factor groupings. Confirmatory factor analysis, however, was not used because the study was meant to be exploratory and was not meant to test a specific theory. Instead, exploratory factor analysis was conducted using principal component analysis and a varimax rotation. This means that the analysis aimed to maximize the variance among variables while minimizing the number of factors (Thompson, 2004) and the original identified factor groupings did not need to be maintained.

Before conducting the factor analysis it was estimated that seven factors would be identified, each consisting of five variables which were compiled using volunteer literature. Results of the factor analysis, however, identified nine factor groupings with two to five variables in each group (Table 4.6). When defining factors through principal component factor analysis a general rule maintains that all factors with eigenvalues greater than one remain as valid factors (Stevens, 2002). Nine factors met this criteria with eigenvalues of 8.203, 3.617, 3.106, 2.219, 1.684, 1.342, 1.240, and 1.009. After manually reviewing the logic of association between variable components of the factors with eigenvalues above one, it was decided that a nine factor solution does fit the data.

A further assessment of reliability using Cronbach's alpha resulted in reliability scores of 0.93, 0.81, 0.81, 0.75, 0.82, 0.86, 0.59, 0.63, 0.64 for the nine factors (Table 4.6). An alpha score above 0.7 is often considered adequate at the beginning stages of researching (Nunnally & Bernstein, 1994). Several points need to be considered, however, when

assessing the value of alpha scores. The last three factors with low alpha scores (0.59, 0.63, 0.64) only consist of two or three variables, which makes them more vulnerable to small differences between variable scores (Schmitt, 1996). Future versions of the questionnaire could include new variables that seem to fit appropriately within each factor group in order to reassess the reliability of factor groupings. Careful selection of new variables needs to be considered because the inclusion of several motivation statements that are too closely related, or simply different wording of the same statement, can cause redundancy which will falsely increase the reliability scores of a factor (Streiner, 2003). When presented with low alpha scores it is important to take into consideration whether or not items meaningfully group together and the value of the grouping to the overall research. A lower than desired alpha score may not be important (Schmitt, 1996).

The *Career* motivating factor reflects how some volunteers are motivated by the potential benefit of gaining experience and making career contacts through volunteering. *Environmental Values* consist of variables such as the desire to positively help the environment and the organization. *Personal Growth* focuses on benefits to the volunteer through opportunities to grow and to gain new perspectives. While also concerned with the environment, the *Protective* motivation emphasizes a sense of responsibility, a desire to give back, relieve personal guilt and gain hope or peace of mind through volunteering. *Social Interest* represents the social benefits of volunteering with others, such as meeting new people. The external motivation of *Social Norms* corresponds to giving into pressure from others. *Intrinsic Satisfaction* identifies personal satisfaction and intangible rewards one can gain by helping. *Efficacy* emphasizes the desire or need to be useful and specifically needed by the organization. Finally, as volunteering is a freely chosen activity, the amount of flexibility and freedom to work at one's own pace is expressed through the desire for *Independence*.

Of the 35 motivation variables, both "I was concerned about the environment for future generations" and "I felt a sense of responsibility towards the environment" scored closely within the Environmental Values factor and the Protective factor. Upon reviewing the

statements in context with the other motivation variables, it was decided to include “I was concerned about the environment for future generations” with Environmental Values and “I felt a sense of responsibility towards the environment” with Protective. Even though the two variables did not score the highest within these variables, their factor scores were close enough to justify their placements using logic of association.

Table 4.6 Factor analysis of volunteer motivation statements (Q 7) (n=149)

Motivational Factors	Factor Scores 1	2	3	4	5	6	7	8	9	Clary et. al (1998) factors	Anticipated Factors
Career											
I wanted to make new contacts that might help my business or career.	0.99	0.00	0.07	0.02	0.03	0.11	-0.03	0.16	0.01	Career	Career
I thought volunteering could help me to succeed in my chosen profession.	0.89	0.10	0.02	0.06	0.11	-0.03	0.08	0.12	-0.05	Career	Career
Volunteering could help me to get my foot in the door at a place where I wanted to work.	0.88	-0.05	0.14	0.00	-0.01	0.13	-0.15	0.06	0.02	Career	Career
Volunteering allowed me to explore different career options.	0.82	0.00	0.28	0.15	0.06	0.14	0.09	0.02	-0.01	Career	Career
I thought volunteer experience would look good on my résumé.	0.81	0.10	0.12	0.13	-0.02	0.03	0.08	-0.13	0.11	Career	Career
Environmental Values											
I thought I could do something for a cause that was important to me.	0.07	0.80	0.13	0.09	0.02	-0.02	0.14	0.16	-0.09	Values	Values
I wanted to help the organization.	-0.01	0.74	0.07	-0.03	0.12	0.05	0.23	0.12	-0.04	Values	Values
I was genuinely concerned about the environment.	0.04	0.66	0.01	0.50	-0.05	-0.08	-0.01	0.03	0.19		Values
I was concerned about the environment for future generations.*	0.04	0.56	0.24	0.57	-0.08	-0.01	0.08	0.02	0.03		Values
I thought I would learn more about the cause for which I was volunteering.	0.24	0.50	0.39	0.02	-0.03	0.09	0.37	0.21	-0.13	Understanding	Other learning
Personal Growth											
I believed that volunteering would allow me to gain a new perspective on things.	0.15	0.09	0.75	0.06	0.17	0.14	0.13	0.10	0.12	Understanding	Other learning
I thought I would be able to grow as an individual.	0.20	0.23	0.65	0.16	0.12	0.07	0.15	0.02	0.11		Other learning
I wanted to explore my own strengths.	0.45	0.22	0.63	0.15	-0.03	0.09	0.09	0.00	0.20	Understanding	Other learning
Volunteering gave me a chance to reflect.	0.02	-0.04	0.59	0.29	0.22	0.30	-0.03	0.25	0.11		Other learning
Volunteering let me learn things through direct, hands on experience.	0.43	0.30	0.49	-0.10	-0.08	0.15	0.17	-0.05	-0.10	Understanding	Other learning
Protective											
I wanted to give back to nature.	0.01	0.20	0.04	0.78	-0.09	-0.09	0.08	0.02	0.03		Protective
I thought volunteering would relieve me of some guilt over my environmental impacts.	0.19	-0.05	0.00	0.63	0.20	0.20	-0.01	0.06	-0.03	Protective	Protective
I expected that volunteering to help me feel more hopeful about the future of the environment.	0.09	0.12	0.21	0.63	0.07	0.26	0.19	0.20	0.04		Protective
I felt a sense of responsibility towards the environment.*	0.10	0.58	0.15	0.56	-0.05	0.03	-0.16	0.10	0.12		Protective
Volunteering gave me peace of mind.	0.07	-0.23	0.31	0.48	0.04	0.27	0.36	0.29	0.19		Protective

Continued on next page.

Table 4.6 continued. Factor analysis of volunteer motivation statements (Q 7) (*n*=149)

Motivational Factors	Factor Loadings									Clary et. al (1998) factors	Anticipated Factors
	1	2	3	4	5	6	7	8	9		
Social Norms											
People I am close to wanted me to volunteer.	0.00	-0.03	-0.01	-0.04	0.85	0.03	-0.05	0.15	0.01	Social	Push social
My friends volunteered.	0.09	0.04	0.09	0.03	0.80	0.10	0.11	-0.10	0.11	Social	Push social
I knew others who volunteer with this organization.	0.02	0.09	0.13	0.01	0.76	-0.05	-0.02	-0.11	-0.14		Push social
Volunteering was an important activity to people I know best.	0.04	-0.08	0.08	0.09	0.74	0.21	0.10	0.05	0.18	Social	Push social
Social Interests											
Volunteering was a way to make new friends.	0.11	0.03	0.07	0.12	0.07	0.90	-0.02	-0.10	0.04	Enhancement	Pull Social
I could meet new people	0.17	-0.01	0.22	0.06	0.08	0.88	0.10	-0.07	0.03		Pull Social
I enjoyed the social aspects of volunteering.	0.07	0.01	0.14	0.06	0.13	0.73	0.30	0.22	-0.05		Pull Social
Intrinsic											
I found volunteer activities enjoyable	-0.04	0.12	0.10	-0.05	0.04	0.22	0.77	-0.08	0.02		Pull Social
I felt it was important to help others.	0.09	0.23	0.07	0.20	0.22	-0.10	0.61	0.12	-0.29	Values	Values
I found my volunteer work to be rewarding	0.04	0.17	0.22	0.14	-0.06	0.17	0.55	0.28	0.25		Empowerment
Efficacy											
I had knowledge and skills that could be useful to the organization.	0.16	0.04	-0.06	0.04	-0.04	-0.06	0.13	0.79	0.10		Empowerment
I felt the organization needed me.	-0.03	0.35	0.34	-0.01	0.11	0.05	-0.17	0.62	-0.12		Empowerment
I felt like my volunteer work would make a difference	0.02	0.40	0.18	0.13	-0.04	0.02	0.14	0.57	0.06		Empowerment
Independence											
I expected to have freedom to decide how to carry out my volunteer assignment.	0.05	0.04	0.05	-0.01	0.04	0.02	-0.06	0.03	0.86		Empowerment
I expected volunteering to allow me to work at my own pace.	0.02	-0.05	0.18	0.13	0.08	0.00	0.05	0.06	0.75		Empowerment
Eigenvalue	8.203	3.617	3.106	2.219	1.684	1.342	1.240	1.009	0.835		
Cronbach's alpha	0.93	0.81	0.81	0.75	0.82	0.86	0.59	0.63	0.64		
% of variance explained	23.4	10.3	8.9	6.3	5.9	4.8	3.8	3.5	2.9		

* Category selection by logic of association rather than factor score

The initial factor order given through factor analysis reflects strength of variance explained. However, this order does not necessarily reflect the overall importance of the motivation factors to volunteers themselves. Rank order of motivation factors by mean factor score is shown in Table8. Environmental Values, Intrinsic Satisfaction and Efficacy each received mean factor scores at 3.9, 3.8 and 3.5 respectively (out of 5). Indicating that they are the most highly rated motivating factors with mean factor scores above three (3= "somewhat important"). The remaining factors had mean factor scores between 2.9 and 1.6.

Low overall mean factor scores indicate that the factors are not highly influential motivators for the majority of volunteers. Factors with low overall mean scores should not, however, be discarded as inconsequential. When mean factor scores are calculated on an individual basis for each respondent it becomes clear that individuals possess unique motives for volunteering. Three motivation strength levels were created in order to determine the extent to which each factor initially motivated individual volunteers. A factor was considered to be a "motivator" if a respondent had a mean factor score greater than three. A factor was designated as a "minimal motivator" for individual respondents with a mean factor score greater than one and less than or equal to three. A mean score greater than three chosen as the division between motivator and minimal motivator because three on the Likert-style scale was listed as somewhat important and four as very important. For an individual to have a mean score greater than three at least one statement within the factor must have been rated as very important to the respondent. A mean factor score equal to one is "not at all a motivator" because none of the statements in the factor were rated as at least slightly important. The number of survey respondents within each motivation category for each factor is shown in Table 4.8.

Table 4.7 Volunteer motivation factors by strength of factor mean (Q 7) (*n*=149)

Motivational Factor	Response by % of respondents: Not at all important 1	Slightly important 2	Somewhat important 3	Very important 4	Extremely important 5	Mean	S.d.	Missing
Environmental Values								
I was genuinely concerned about the environment.	2.7	1.3	9.4	28.9	57.7	4.4	0.9	0
I thought I could do something for a cause that was important to me.	3.4	3.4	12.8	36.9	43.6	4.1	1.0	0
I wanted to help the organization.	2.7	2.0	18.1	49.0	28.8	4.0	0.9	0
I was concerned about the environment for future generations.*	6.0	6.0	17.4	34.9	35.6	3.9	1.1	0
I thought I would learn more about the cause for which I was volunteering.	8.1	15.4	32.2	30.9	13.4	3.3	1.1	0
Factor Mean = 3.9						**3.9**		
Intrinsic satisfaction								
I found my volunteer work to be rewarding	0.7	6.0	18.8	41.6	32.9	4.0	0.9	0
I found volunteer activities enjoyable	2.0	2.0	22.8	54.4	18.8	3.9	0.8	0
I felt it was important to help others.	6.7	10.7	26.2	39.6	16.8	3.5	1.1	0
Factor Mean = 3.8						**3.8**		
Efficacy								
I felt like my volunteer work would make a difference	2.0	5.4	20.1	40.9	31.5	4.0	1.0	0
I had knowledge and skills that could be useful to the organization.	6.7	12.1	25.5	41.6	14.1	3.4	1.1	0
I felt the organization needed me.	14.2	16.9	31.8	29.7	7.4	3.0	1.2	1
Factor Mean = 3.5						**3.5**		
Protective								
I felt a sense of responsibility towards the environment.*	4.0	8.7	23.5	28.9	34.9	3.8	1.1	0
I wanted to give back to nature.	11.4	11.4	18.8	24.8	33.6	3.6	1.4	0
I expected that volunteering to help me feel more hopeful about the future of the environment.	15.4	18.8	28.9	24.8	12.1	3.0	1.2	0
Volunteering gave me peace of mind.	28.2	18.1	27.5	18.8	7.4	2.6	1.3	0
I thought volunteering would relieve me of some guilt over my environmental impacts.	57.0	20.8	14.8	4.7	2.7	1.8	1.0	0
Factor Mean = 2.9						**2.9**		
Social Interests								
I enjoyed the social aspects of volunteering.	10.1	12.8	26.8	36.2	14.1	3.3	1.2	0
I could meet new people	23.5	22.1	26.2	19.5	8.7	2.7	1.3	0
Volunteering was a way to make new friends.	28.9	26.2	26.8	10.7	7.4	2.4	1.2	0
Factor Mean = 2.8						**2.8**		

Table 4.7 Continued Volunteer motivation factors by strength of factor mean (Q 7)

Motivational Factor	Not at all important 1	Slightly important 2	Somewhat important 3	Very important 4	Extremely important 5	Mean	S.d.	Missing
Personal Growth								
Volunteering let me learn things through direct, hands on experience.	7.4	12.2	19.6	36.5	24.3	3.6	1.2	1
I believed that volunteering would allow me to gain a new perspective on things.	12.8	22.3	31.1	28.4	5.4	2.9	1.1	1
I thought I would be able to grow as an individual.	18.9	18.2	28.4	25.7	8.8	2.9	1.2	1
I wanted to explore my own strengths.	31.5	20.1	22.1	21.5	4.7	2.5	1.3	0
Volunteering gave me a chance to reflect.	36.5	17.6	23.0	17.6	5.4	2.4	1.3	1
Factor Mean = 2.8						**2.8**		
Career								
I wanted to make new contacts that might help my business or career.	49.7	14.1	15.4	10.1	10.7	2.2	1.4	0
I thought volunteering could help me to succeed in my chosen profession.	51.0	10.7	16.8	14.1	7.4	2.2	1.4	0
Volunteering could help me to get my foot in the door at a place where I wanted to work.	52.7	14.9	11.5	12.2	8.8	2.1	1.4	1
Volunteering allowed me to explore different career options.	50.3	17.4	13.4	10.7	8.1	2.1	1.3	0
I thought volunteer experience would look good on my résumé.	50.0	14.9	16.2	11.5	7.4	2.1	1.3	1
Factor Mean = 2.1						**2.1**		
Independence								
I expected to have freedom to decide how to carry out my volunteer assignment.	32.4	27.7	24.3	11.5	4.1	2.3	1.2	1
I expected volunteering to allow me to work at my own pace.	46.6	20.9	20.9	6.8	4.7	2.0	1.2	1
Factor Mean = 2.1						**2.1**		
Social Norms								
I knew others who volunteer with this organization.	61.1	15.4	10.7	8.7	4.0	1.8	1.2	0
People I am close to wanted me to volunteer.	71.1	11.4	8.7	6.0	2.7	1.6	1.1	0
Volunteering was an important activity to people I know best.	65.1	19.5	10.1	2.7	2.7	1.6	1.0	0
My friends volunteered.	76.5	14.8	5.4	2.7	0.7	1.4	0.8	0
Factor Mean = 1.6						**1.6**		

One survey respondent did not provide a rating for nine motivation statements. This reduced the *n* size to 148 respondents and prevented the survey from being included in further analysis, including rating the influence of each motivational factor.

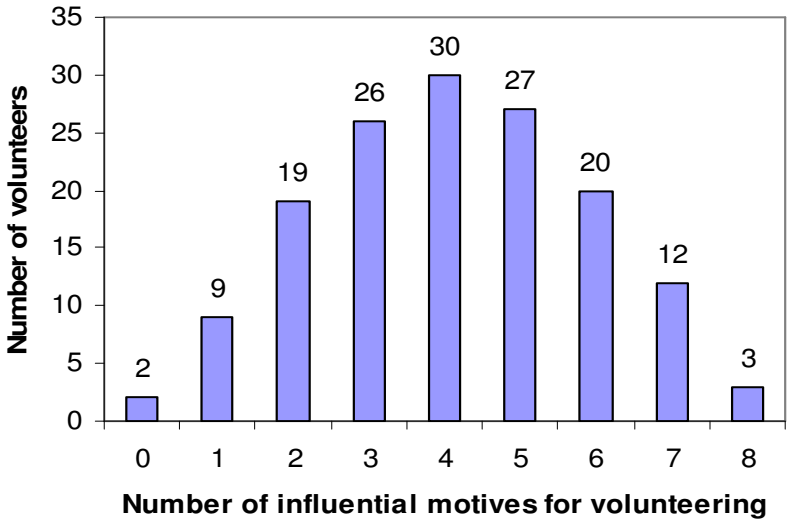
Each factor was rated as a motivator for at least a portion of the volunteers surveyed (Table 4.8). Environmental Values, with the highest mean factor score, was a motivator for 131 people (88.5%) and was "not at all important" to only one respondent (0.7%). Slightly behind, Intrinsic Satisfaction was a motivator for 123 respondents (83.1%). It is important to note that Intrinsic Satisfaction was the only factor that did not have a single respondent with a "not at all important" score. Efficacy, Protective, and Personal Growth each only had two individuals (1.4%) who were "not at all" motivated by them. Social Interest, Career, and Independence were respectively rated as "not at all important" to 9 (6.1%), 55 (37.2%), and 35 (23.6%) respondents. The least common motivator was Social Norms with only nine (6.1%) motivated respondents and 64 (43.2%) respondents who were not at all motivated by social pressure to volunteer. The implications of these results will be discussed in detail in the discussion chapter.

Table 4.8 Influential volunteer motivation factors frequency of response (*n*=148)

	Not at All Important Mean score =1	Minimal Influence Mean score ≤3 & >1	Motivator Mean score ≤5 & >3		Total	Mean Score
	Frequency	Frequency	Frequency	Mean		
Environmental Values	1	16	131	4.1	148	3.9
Intrinsic Satisfaction	0	25	123	4.0	148	3.8
Efficacy	2	45	101	3.9	148	3.5
Protective	2	80	66	3.7	148	2.9
Personal Growth	2	84	62	3.7	148	2.8
Social Interest	9	82	57	3.9	148	2.8
Career	55	55	38	3.9	148	2.1
Independence	35	92	21	4.0	148	2.1
Social Norms	64	75	9	3.8	148	1.6

Using Likert-style volunteer motivation variables gave each volunteer the potential to be motivated by as many as all nine motivation factors or by as few as none of the motivation factors (Figure 4.6). The established mean factor score above three was used to designate a factor as a "motivator." Respondents were found to be motivated by as many as eight different factors and as few as none of the identified motivating factors.

Figure 4.6 Number of influential motives per respondent (*n*=148)



4.1.2.2 Volunteer motivation qualitative analysis

Following the Likert-style statements of potential reasons why people began volunteering, respondents were given the opportunity to use their own words to express the most important reasons why they began volunteering with their particular organization (Q 8). Qualitative analysis was conducted by manually coding and categorizing the 142 completed responses in four stages using descriptive (category labels) and analytic (contextual) codes (Cope, 2005).

The first stage of coding organized respondent statements into the nine defined motives to volunteer identified through factor analysis. Three new factors – *Community Integration*, *Other benefits*, and *Location* – were created to include motives that did not fit with the

initial factors. The second stage of coding was used to create sub-motivating factors within each category. These sub-factors provide more depth of context to support the individual ways people relate to each motive.

While categorizing responses by factors it was noticed that respondents were listing specific reasons why they chose their specific volunteer organization. Four types of attractants were identified as influencing volunteers decision to join a particular organization. The four attractants identified were: a specific project or place, an issue, the organization itself, the volunteer activity. A third stage of analysis was conducted to indicate the specific attractants identified as reasons why people started as related to each sub-factor. Each main motivating factor was categorized as being either an intrinsic, extrinsic or supporting motive (Table 4.9).

Table 4.9 Motivation factors identified by qualitative analysis

	Motivating Factors	Motivating Sub-factors	Attractant			
			Place/ Project	Issue	Organization	Activity
Intrinsic motivation	Environmental values	-Empowered to impact the environment	*	*	*	
		-Share values with others	*	*	*	*
		-To help the organization		*	*	
	Efficacy	-Effective activity	*	*		*
		-Personal skills to offer		*	*	*
	Intrinsic satisfaction	-Fun				*
		-Enjoyment				*
		-Altruism		*	*	
Extrinsic motivation	Career	-Work experience		*		*
		-Career exploration			*	*
		-School requirement		*		*
	Community Integration	-Be part of local community	*			
	Personal Growth	-Skills/experience		*		*
		-Knowledge/understanding	*	*	*	
	Protective	-Personal responsibility	*	*		
		-Hope for solutions	*	*		
	Social Interests	-Socialize with people of similar values				*
	Social Norms	-Spouse/family work for organization			*	
	Other Benefits	-Exercise				*
		-Something to do				*
Supporting motivation	Independence	-Time requirement				*
		-Flexibility				*
	Location	-Close to home	*			

Italics indicate new motivation factor

Intrinsic Motivations

Intrinsically motivated behaviours are defined as behaviours that people "find interesting and that, in turn, promote growth" (Deci & Ryan, 2000, P. 233). To qualify as intrinsic, motives cannot be linked to potential reward, coercion or threat of punishment (Deci & Ryan, 2000). Environmental Values, Efficacy, Intrinsic Satisfaction and Personal Growth are the four motivating factors that best fit the requirements of intrinsic motives. While each of these factors has been separated into separate categories, the ideas and feelings expressed are often an inseparable combination of these motives. For example one individual wrote: "There is great satisfaction in seeing the positive results in the Gary Oak ecosystem when all aggressive invasive species are removed." This one statement represents the interconnection between Intrinsic Satisfaction, Environmental Values, and Efficacy and how difficult it can be to separate and distinguish individual motives for some respondents.

Environmental Values, the most commonly rated motivator during quantitative analysis, continued to be highly important to the written responses given by volunteers. Volunteering was found to empower people to positively engage in environmental conservation. Empowerment is different than efficacy in that it is not just making a difference but having the opportunity through volunteering.

> "For years I have been dismayed, and continue to be dismayed, at the impact of industry and its hackers, the politicians have been having on the magnificent wildlife and ecosystems of our province. Through volunteering I have been able to help out in a small way and become better informed about the issues so I can convey my concerns to those in power."

Sometimes specific environmental issues, or the ability to focus on conservation in a particular location brought a more specific and personal connection to the experience.

> "To make a positive contribution to addressing climate change."
> "I had a personal connection to the restoration project."

The reputation and focus of specific organizations was an important volunteer attractant, often but not always in connection with a particular project.

> "I value the mission of the organization and particularly value this mission being important where I live."
> "Their commitment to the environment and their restoration efforts are amazing and I wanted to be part of it."

Empowerment to engage in environmental actions was not only important for a volunteer's personal action, but volunteers were also attracted by the opportunity to share their values and empower others to engage in sustainable actions.

> "To make a contribution to the environment and to encourage others to help the environment through actions such as composting."

Respondents described two important components of Efficacy in volunteering. The first is the effectiveness of the volunteer activities and projects themselves.

> "The goals of the organization really mattered, and they had to be PRACTICAL, ACHIEVABLE projects, that would have long-term positive effects."
> "There is great satisfaction in seeing the positive results in the Gary Oak ecosystem when all aggressive invasive species are removed."

The second important efficacy component was found in personal efficacy, or the perceived value of one's personal contribution as a volunteer. Volunteers were motivated because they felt that they had skills and ability to make a difference.

> "We need people in society to help rally everyone else about important issues, I have the skills to do this."
> "I wanted to bring my knowledge of organic farming and guidelines to the board…"

> "…I want to make a difference…"

Because the effectiveness of one's work is not always instantly obvious, organizations play an important role in conveying the importance of volunteer efforts. When volunteers feel valued they believe that their efforts make a difference to the organization which creates a sense of efficacy:

> "The most important reason I volunteer with this organization is the respect and appreciation they show to the volunteer force."

Intrinsic Satisfaction is made up of the intangible rewards that come from satisfaction with one's accomplishments, enjoyable volunteer activities, and the ability to fulfill one's values through volunteering.

> "I enjoy being outside. I like to learn about nature every chance I get. I appreciate the peace + quiet of this wonderful area."
> "…I chose to volunteer [with the organization] because I enjoy the work…"
> "I enjoy teaching children and sharing my own knowledge of and enthusiasm for the environment."

Extrinsic Motivations

When an individual volunteers for reasons beyond the intrinsic motives listed above, his or her behaviour is likely "controlled by specific external contingencies. People behave to attain a desired consequence such as tangible rewards or to avoid a threatened punishment" (Deci & Ryan, 2000, pg. 236). Common external motives found to influence volunteers were the desire to connect to their community, influence their future career options, gain new skills, protect themselves from negative feelings related to the environment, socialize, and live up to the expectations of others.

For volunteers who had not yet reached the retirement stage of their life, volunteering offered potential Career benefits. For those in early stages of their adult lives who were

not yet fully immersed in the working world, volunteering was a way to apply learned knowledge, build their resume and test different career options. Volunteers who already had careers were able to use volunteering as a way to explore options for potential career changes and build skills that would facilitate the transition.

> "It was a requirement of my diploma field work to work with an established conservation society and [the organization] was the society in the area where I wanted to work."
> "Learning new skills and getting experience in areas related to possible career options."
> "To learn some skills, to have great times, and to make my resume better"

While not included in the original motivating factors, volunteering was found to be an important tool for Community Integration. Long term community residents found that volunteering enables them to be part of projects in their community and meet neighbours. Many new residents specifically chose to volunteer as a way to meet new people and get to know their new communities. As well, for international visitors, volunteering was a way to learn about Canadian society and meet local people during their stay.

> "I wanted to contribute to a local project in my community and meet my neighbours."
> "I feel that it is important to give back to the community."
> "To feel connected to the community that we had just moved to."
> "In order to absorb Canadian cultures and ideas."

The types of volunteer opportunities undertaken by respondents were often seen as opportunities for Personal Growth. In some cases personal growth was intended as part of future life plans, such as employment skills, while others used personal growth as part of their continuing life long learning and general personal betterment and understanding.

> "To remain young."

> "…I wanted to broaden my horizons…"
>
> "To enrich my knowledge and understanding of our surrounding environment and the issues affecting it…"

The word 'guilt' was not used by any survey respondents, however, feelings of personal responsibility and desire to give back are equally important to the Protective motivating factor. The term protective is used by Clary et al. (1998) to describe motivations that aim to protect one's ego. The motivation statements included in this study indicate that individuals are looking for peace of mind. They feel responsible for the environment and want to give back to nature. By not volunteering they could potentially feel guilty for not acting to the best of their abilities in an attempt to protect the environment. Volunteering allows some individuals to feel like they have at least tried to make a difference. Respondents find that volunteering allows them to feel better and fulfill part of their responsibility to the environment. The Protective motivation is a self-determined extrinsic motivation (Deci & Ryan, 2000). Whereas intrinsic motivations are personal interest, satisfaction and sense of accomplishment, extrinsic motives involve some type of reward or escape from an undesirable consequence. When an individual is acting in an attempt to live up to personal values they are no longer just acting to avoid an undesirable consequence or to receive a reward because they also believe in what they are doing. This does not alter the fact that they are still externally motivated. Integrated self regulation still falls within external motivation on the self-determination continuum identified by Deci and Ryan (2000).

> "I think it's important to 'give back' to your community"
>
> "I feel I am partly responsible for the future of this world. A better world will also have a direct effect on my future."
>
> "[The organization] went out of their way to help us out last year and we felt we should return the favour."

Many volunteer roles provide the opportunity to meet and socialize with other volunteers. This opportunity to interact with others who share similar values proved to be an attractant to those with Social Interests.

> "…meeting new people and working together to achieve a common goal."
> "To meet like-minded people with similar values."
> "Volunteering filled that urge to connect with people outside my immediate peer group."

Social Norms is influenced by pre-existing relationships that encourage a person's decision to volunteer with a particular organization.

> "Friends work & volunteer with this organization"
> "To help my wife who is an employee."
> "…I had old friends who could introduce me."

Every person's decision to volunteer is unique, which is reflected in the Other Benefits identified in the surveys. Some of these other benefits include commitment to physical activity, the ability to spend time with family and the benefits of keeping an active mind.

> "Because I enjoy the outdoors and I wanted to keep in shape. I wanted to lose some weight, so I thought that this will keep me dedicated and it has so far."
> "…gave me a chance to teach my children the importance of community and volunteering."
> "Keep my brain from atrophying"

Supporting motivations

The supporting motives designation is meant to include motives that encourage or enable individuals to volunteer, but are not the sole or most important motive that engage the volunteer. It seems unlikely that an individual will decide to engage in a volunteer activity solely because the activity is close to home and/or fits his or her schedule without

also being influenced by another motive such as personal interest or social connections within the organization. The low factor mean of 2.1 received by the Independence motivation factor during factor analysis supports the secondary motivational role that independence plays in motivating volunteers. Independence includes the ability to decide how to undertake volunteer activities or to work at one's own pace. No open ended responses directly mention the desire for independence, however it could be implied by some of their responses.

Other supporting motives including location and time of volunteer activity were mentioned.

> "I like doing something physical to help, and the working weekends seemed ideal!"

This is an example of choosing times that are convenient as well as an activity that fits personal interest, in this case the desire to do physical activity. While not mentioned, time of year could affect volunteer availability and interest in volunteering.

Along similar lines, the volunteer location was an important contributor to some volunteers' decision to volunteer. Living close to the volunteer location not only helps to facilitate volunteering but it also adds extra personal connection to the experience.

> "…this is a park in my home community and is important to me."
> "It was an excellent outdoor opportunity near my house, at the time convenient to me and where I had old friends who could introduce me."
> "It was in my 'neighbourhood.' I could paddle my Kayak to the 'job' …, rather than have to drive my car."

Analysis of respondent descriptions of why they began to volunteer helps to portray the complex relationship between different motives. It was rare for respondents to give only one reason for volunteering and they were often motivated by a combination of intrinsic

and extrinsic motives. Qualitative analysis revealed that individuals motivated by the same factor can actually have a different attracting emphasis, such as individuals motivated by environmental conservation may be attracted to a specific conservation issue, project, organization, or activity. Proximity to the volunteer site was shown to enable participation while assisting to create a greater connection to the local community. Individuals seemed to choose activities that utilized their skills and interests in a way that empowered them to take positive action for the environment.

4.1.2.3 Volunteer typology based on motivations

One of the goals of this study was to explore potential types of environmental volunteers based on volunteer motivation. The factor analysis results and factor scores were used to conduct exploratory cluster analysis in an attempt to determine if any logical volunteer types could be identified based on motives to begin volunteering. Exploratory analysis has two main goals (Thompson, 2004). The first goal is to identify meaningful groups that are sufficiently distinguishable from one another based on the motives of the individuals in the group. The second goal is to identify groups with sufficient individuals in each group to justify its existence. Too few individuals in a group may represent a unique sub-type of volunteer rather than a general volunteer type.

Exploratory cluster analysis was conducted with groupings of three to eight different clusters. The results of the five cluster, six cluster, and seven cluster solution are presented in Tables 4.10, 4.11, and 4.12 respectively. The five and seven cluster solutions are presented to demonstrate how the six cluster solution was chosen to represent the principal volunteer types identified among survey respondents. For each cluster a factor was considered to be an influential motivator if the cluster mean factor score was greater than three. The same reasoning that was used for identifying influential motives in Table 4.8 was used to identify clusters of common motives shared among volunteers. Within each cluster, a factor score less than three but greater than one indicates that group members likely considered the factor when making their decision to volunteer, however, the factor was not a principal motivator for volunteering.

Table 4.10 Volunteer types cluster analysis: five cluster solution

	Mean factor score >3.0				
Motivating factors	Practical Environmentalist 1	Practical Environmentalist 2	Concerned Environmentalist	Other Helpers	Budding Idealist
Career	1.31	1.47	1.89	1.99	**3.87**
Environmental Values	**4.00**	**3.40**	**4.55**	2.71	**4.22**
Personal Growth	2.22	2.96	**3.57**	1.95	**3.62**
Protective	2.67	2.88	**3.75**	1.76	**3.39**
Social Norms	1.29	2.75	1.47	1.21	1.80
Social Interests	2.54	2.98	2.89	2.14	**3.41**
Intrinsic Satisfaction	**3.71**	**3.78**	**4.14**	**3.05**	**4.01**
Efficacy	**3.39**	**3.58**	**3.73**	2.63	**3.75**
Independence	1.90	2.74	2.38	1.61	2.36
Total	51	15	28	19	35

*Bold indicates motivating factor.

Table 4.11 Volunteer types cluster analysis: six cluster solution

	Mean factor score >3.0					
Motivating factors	Practical	Concerned	Career	Budding Idealist	Social	Other Helpers
Career	1.35	1.71	**3.54**	**3.79**	1.46	1.25
Environmental Values	**4.06**	**4.55**	**3.89**	**4.27**	**3.56**	2.81
Personal Growth	2.33	**3.54**	**3.05**	**3.70**	3.00	1.75
Protective	2.72	**3.74**	2.14	**3.80**	2.99	2.00
Social Norms	1.27	1.31	1.64	1.82	2.95	1.24
Social Interests	2.69	2.65	2.73	**3.58**	**3.02**	2.03
Intrinsic Satisfaction	**3.76**	**4.09**	**3.71**	**4.11**	**3.81**	**3.11**
Efficacy	**3.49**	**3.77**	**3.60**	**3.69**	**3.69**	2.49
Independence	1.84	2.43	1.88	2.44	2.65	1.98
Total	45	22	16	30	14	21

*Bold indicates motivating factor.

Table 4.12 Volunteer types cluster analysis: seven cluster solution

Motivating factors	Mean factor score >3.0						
	Practical	Concerned	Career	Budding Idealist A	Budding Idealist B	Social	Other Helpers
Career	1.32	1.82	**3.47**	**4.06**	**3.90**	1.57	1.25
Environmental Values	**4.07**	**4.53**	**3.92**	**3.98**	**4.53**	**3.59**	2.81
Personal Growth	2.33	**3.54**	2.93	**3.55**	**4.22**	2.93	1.75
Protective	2.72	**3.81**	2.28	**3.78**	**3.67**	**3.04**	2.00
Social Norms	1.28	1.37	1.52	1.21	2.54	2.93	1.24
Social Interests	2.65	2.83	2.81	**3.36**	**3.78**	**3.04**	2.03
Intrinsic Satisfaction	**3.77**	**4.15**	**3.76**	**3.82**	**4.25**	**3.82**	**3.11**
Efficacy	**3.51**	**3.71**	**3.57**	**3.72**	**3.81**	**3.64**	2.49
Independence	1.80	2.44	1.95	2.35	2.50	2.70	1.98
Total volunteers	44	25	18	13	12	15	21

*Bold indicates motivating factor.

The five cluster solution actually reveals only four different groupings of volunteer types (Table 4.10). Two clusters share the same influential motives but are differentiated by varying emphasis on their non-influential motivators. These two groups combine to form the *Practical Environmentalist* category which represents individuals who primarily volunteer because of their environmental values, their desire to make a difference through volunteering, and the intrinsic satisfaction they receive through their volunteer work. The *Concerned Environmentalist,* is the group most highly motivated by environmental values. It is also motivated by intrinsic satisfaction, efficacy, the desire for personal growth and the protective motive led by feelings of personal responsibility for the environment. *Budding Idealists* want to achieve almost everything through volunteering. They are motivated by seven of nine factors with the exception of social norms and independence. Finally, the cluster *Other Helpers* is composed of individuals who do not fit within the primary clusters but who are united by their search for intrinsic satisfaction through volunteering.

The six cluster solution of volunteer types (Table 4.11) consists of the four groups identified in the five cluster solution (Practical Environmentalist, Concerned Environmentalist, Budding Idealist, and Other Helpers) and adds two additional volunteer types. A group of individuals who are focused on career development and personal growth within the environmental field make up the *Career Environmentalists*. They are not motivated by social interests or feelings of responsibility for the environment. The second new volunteer type, the *Social Environmentalist*, is a variation from of the Practical Environmentalist group with the addition of social interests. Also, even though Social Norms is not considered a motivating factor for Social Environmentalists they have the highest mean score of all the volunteer types for Social Norms.

The results of the seven cluster solution reveal the same six clusters identified by the six cluster solution with two Budding Idealist clusters. Three principal differences are found between the six cluster and seven cluster solutions. The first difference is the split Budding Idealist group with one group scoring higher in environmental values and social

norms. The second difference is found in the Career Environmentalist cluster where the personal growth score fell below 3.0 and is no longer considered a motivating factor. Finally, the Social Environmentalist protective score which was 2.99 in the six cluster solution increased to 3.04. This identifies the group as having an additional motivating factor. The lack of additional meaningful clusters and the increased ambiguity of existing clusters resulting from the seven factor solution suggests that six clusters best fits the requirements of maximizing meaningfully distinguishable groups while maintaining a reasonable number of individuals in each group.

Three factors remained consistent throughout the exploratory clustering regardless of the number of clusters created. The Intrinsic Satisfaction factor is the only factor shared by all cluster groups even though it is only a motivating factor to 83.1% of respondents. This is important to note because, while clustering identifies major groups of volunteers, the results are generalized and do not represent an exact profile of all volunteers. Each volunteer is unique and is likely to have slightly different motives. Likewise, Social Norms and Independence are not important motivators to any cluster despite being motivating factors for 6.1% and 14.2% of respondents respectively. The implications and importance of individual variation and personal preferences within the cluster groupings will be explored further in the discussion chapter.

Cluster differentiation initially consisted of categorizing clusters as being “motivated” or “not motivated” by each factor based on a mean factor score greater than or not greater than 3.0. An analysis of variance test with a Scheffe follow-up test was conducted to determine if significant differences exist between motivation factor scores for each volunteer type cluster. Significant differences were found between clusters for each motivation factor except Independence (Table 4.13). The Scheffe post hoc test is a range test used to identify the specific variables that have significantly different means (Cardinal & Aitken, 2006). For this test, all possible pairwise combinations of variable means are simultaneously compared. The results highlight subtle differences between cluster motivations beyond the motivated/not motivated categories. These differences are not always consistent with the differences identified by the motivating factor divisions.

Table 4.13 Significant difference between volunteer clusters for each motivation factor

Motivation factors	Vol. cluster	Practical environmentalist A	Concerned environmentalist B	Career environmentalist C	Budding idealist D	Social environmentalist E	Other helpers F
Career	B	A=B	-				
	C	A<***C***	B<***C***	-			
	D	A<***D***	B<***D***	***C=D***	-		
	E	A=E	B=E	***C***>E	***D***>E	-	
Other helpers	F	A=F	B=F	***C***>F	***D***>F	E=F	-
Environmental values	B	***A=B***	-				
	C	***A=C***	***B>C***	-			
	D	***A=D***	***B=D***	***C=D***	-		
	E	***A=E***	***B>E***	***C=E***	***D>E***	-	
Other Helpers	F	***A***>F	***B***>F	***C***>F	***D***>F	***E***>F	-
Personal growth	B	A<***B***	-				
	C	A<***C***	***B=C***	-			
	D	A<***D***	***B=D***	***C<D***	-		
	E	A<E	***B***=E	***C***=E	***D***>E	-	
Other helpers	F	A>F	***B***>F	***C***>F	***D***>F	E>F	-
Protective	B	A<***B***	-				
	C	A>C	***B***>C	-			
	D	A<***D***	***B=D***	C<***D***	-		
	E	A=E	***B***>E	C<E	***D***>E	-	
Other helpers	F	A>F	***B***>F	C=F	***D***>F	E>F	-
Social norms	B	A=B	-				
	C	A=C	B=C	-			
	D	A<D	B=D	C=D	-		
	E	A<E	B<E	C<E	D<E	-	
Other helpers	F	A=F	B=F	C=F	D>F	E>F	-
Social interests	B	A=B	-				
	C	A=C	B=C	-			
	D	A<***D***	B=***D***	C=***D***	-		
	E	A=***E***	B=***E***	C=***E***	***D=E***	-	
Other helpers	F	A=F	B=F	C=F	***D***>F	***E***=F	-
Intrinsic satisfaction	B	***A=B***	-				
	C	***A=C***	***B=C***	-			
	D	***A=D***	***B=D***	***C=D***	-		
	E	***A=E***	***B=E***	***C=E***	***D=E***	-	
Other helpers	F	***A>F***	***B>F***	***C=F***	***D>F***	***E=F***	-
Efficacy	B	***A=B***	-				
	C	***A=C***	***B=C***	-			
	D	***A=D***	***B=D***	***C=D***	-		
	E	***A=E***	***B=E***	***C=E***	***D=E***	-	
Other helpers	F	***A***>F	***B***>F	***C***>F	***D***>F	***E***>F	-
Independence	B	A=B	-				
	C	A=C	B=C	-			
	D	A=D	B=D	C=D	-		
	E	A=E	B=E	C=E	D=E	-	
Other helpers	F	A=F	B=F	C=F	D=F	E=F	-

"=" no significant difference; >significantly larger; <significantly smaller.

* Bold letters indicate a motivating factor for the cluster. Shaded cells indicate inconsistent result between motivation designation and significant difference indication.

Scheffe results were entirely consistent with motivated/not motivated for three factors: Career, Efficacy, and Independence. Within the six clusters of volunteer types, Career environmentalists and Budding idealists were found to be motivated by the career factor. Scheffe results supported that Career Environmentalists (M=3.54, S.D.=0.48) and Budding Idealists (M=3.79, S.D.= 0.75) mean motivation scores were not significantly different from each other but do have significantly different means from the other four volunteer types. The remaining types, which were not motivated by career, were not significantly different from each other.

Cluster analysis found that all of the volunteer types except Other Helpers are motivated by efficacy. Within Efficacy, Scheffe results supported that there is no significant difference between Practical Environmentalists (M=3.49, S.D= 0.74), Concerned Environmentalists (M=3.77, S.D.=0.59), Career Environmentalists (M=3.60, S.D.=0.65), Budding Idealists (M=3.69, S.D.= 0.73) and Social Environmentalists (M=3.69, S.D.=0.74). They were all, however, significantly different from Other Helpers (M=2.49, S.D.=0.76). No significant difference was identified between the mean scores for any of the six volunteer types.

The final six motivation factors all varied slightly in their Scheffe results compared to the identified motivated/not motivated categories. Scheffe results for Environmental Values found that Other Helpers (M=2.81, S.D.= 0.78) was significantly different from all other volunteer types. This is consistent with Other Helpers being the only group not motivated by Environmental Values within the volunteer cluster groups. Significant differences, however, were identified within the volunteer groups designated as “motivated” by Environmental Values. Specifically, the Social Environmentalists group (M=3.65, S.D=0.63) was found to be significantly different from both Concerned Environmentalists (M=4.55, S.D.=0.34) and Budding Idealists (M=4.27, S.D.=0.58). The Career Environmentalists group (M=3.89, S.D.=0.61) was found to be significantly different than Concerned Environmentalists. These significant differences between volunteer types within the “motivated” category identify potential levels or degrees of motivation that can help set the groups apart.

The Personal Growth motive was found to be a motivator for Concerned Environmentalists, Career Environmentalists and Budding Idealists. Scheffe results identified significant differences were between all of the non-motivated volunteer types: Practical Environmentalist (M=2.33, S.D.= 0.61), Social Environmentalist (M=3.00, S.D.=0.57) and Other helpers (M=1.75, S.D.=0.53). These significant differences indicate that even when factors are not primary motivators they may have some influence on a volunteer's decision to volunteer and can be important when differentiating between volunteer types.

The results of the volunteer motivation portion of the survey analysis found that concern for the environment and a desire to help or to make a difference were the most influential factors to respondents' decision to begin volunteering within an environmental organization. Principal component factor analysis divided thirty five statements of potential reasons for volunteering into nine motivation factors. All of the nine factors were motivating reasons to at least some of the respondents. Environmental Values, Intrinsic Satisfaction, and Efficacy were the three most common motivators. Exploratory cluster analysis of motivation factors supports the existence of six types of environmental volunteers within the study sample. ANOVA and Scheffe tests support the statistical significance of the difference between volunteer types while emphasizing different strengths of motivation. The results of the motivation and cluster analysis will be further explored in combination with other components of the volunteer survey in the results chapter.

4.1.3 Volunteer Satisfaction

After asking volunteers about their motivation to begin volunteering, respondents were asked to rate their level of satisfaction with their volunteer work using a traditional five point Likert-scale ranging from Very Unsatisfied, Unsatisfied, Neutral, Somewhat Satisfied, or Very Satisfied. A total of 12 statements related to specific aspects of the volunteer experience (Q9) and 15 statements focused on the organization's volunteer

management (Q10). Volunteers were also asked to assess their overall satisfaction with their volunteer experience (Q11) and whether or not they would recommend volunteering to a friend (Q12) (Table 4.14). An open ended question gave respondents the opportunity to elaborate on items of satisfaction or dissatisfaction related to their volunteer experience (Q13).

For the most part volunteers were somewhat satisfied (24.7%) or very satisfied (60%) with their volunteer experience. Some participants did respond that they were "somewhat unsatisfied" (4.0%) or "very unsatisfied" (4.7%) with their volunteer experience. It is possible, however, that human response error occurred for some of the paper questionnaires due to a change in question format from horizontal Likert-scale response to vertical Likert-scale response. This seems likely because at least two surveys with "very unsatisfied" responses gave no other indication of dissatisfaction at any other point in the survey. In fact one respondent made a point of stating that the organization does not have problems.

Table 4.14 Volunteer satisfaction

Overall satisfaction rating (Q11)

	Frequency	Valid %
Very Unsatisfied	7	4.9
Somewhat Unsatisfied	6	4.2
Neutral	4	2.8
Somewhat Satisfied	37	25.7
Very Satisfied	90	62.5
Total *n*=145		

Would you recommend this organization to a friend? (Q12)

	Frequency	Valid %
Very Unlikely	3	2.1
Somewhat Unlikely	3	2.1
Not sure	6	4.2
Somewhat likely	24	16.7
Very likely	108	75.0
Total *n*=144		

While creating the survey each of the originally anticipated six motivation factors had one or two corresponding satisfaction items that were intended to compare volunteer motivation and respective satisfaction. The final factor analysis resulted in different motivation factors than originally anticipated. As a result, direct comparison between volunteer motivation and satisfaction is not possible. Raw response data, however, does reveal some important areas of dissatisfaction. Additionally, principal component factor analysis of the variables in question 9 and 10 identify six factors that affect volunteer satisfaction.

Satisfaction with Volunteer Experience

When asked to rate their satisfaction with specific aspects of their volunteer experience, respondents were mostly satisfied or neutral on all items. Therefore, the few areas of dissatisfaction stand out and are important to highlight. The ability of the volunteer experience to meet career goals received the highest "neutral" (57.5%), "somewhat dissatisfied" (6.8%), and "very dissatisfied" (6.2%) responses. For 9.6% of respondents the pull factor of social aspects to volunteering was dissatisfactory. When asked how satisfied they were that people close to them were happy that they volunteered, 6.9% of respondents were not satisfied.

Considering that 68.2% of respondents were found to be motivated by the protective desire to give back to nature, take responsibility for the environment and feel more hopeful about the future, related satisfaction ratings were low. Fewer than half of respondents were satisfied with the ability of volunteering to make them feel better about their environmental impacts as 48.6% of respondents were neutral and 7.5% were "somewhat" or "very" dissatisfied. Likewise, 40.4% of respondents feel neutral about the ability of volunteering to help them feel more hopeful for the future, while 8.2% are "somewhat" or "very" dissatisfied. Despite low ratings for hopefulness and feeling better, only 2.1% of respondents were "somewhat" or "very" dissatisfied with the ability of their volunteer work to positively impact the environment, and, 32.2% were neutral. Lack of obvious satisfaction with the environmental impacts of volunteering is a concern because

meeting volunteer motivations has been found to influence volunteer retention (Clary et al. 1998).

Satisfaction with Organization and Management

Respondents were asked to rate their satisfaction with aspects of their volunteer experience related to the organization and management of the volunteer program (Table 4.15). Most of the satisfaction variables were compiled from the Volunteer Satisfaction Index by Galindo-Kuhn and Guzley (2001) while the rest coincide with volunteer motivation items. Overall, satisfaction ratings were high among the 15 items, however, five items did standout. The statements with the most unsatisfied respondents were the level of project organization (11.9%) and how much chance respondents had to utilize their knowledge and skills while volunteering (9.8%). Communication stood out as a problem in three areas. The ability for the organization to communicate expectations of volunteers was “very” or “somewhat” dissatisfactory for 8.4% of respondents. Clarity of communication between staff and volunteers was dissatisfactory for 7.0% of respondents and the way in which organizations provided performance feedback was unsatisfactory to 7.7% of respondents.

Table 4.15 Volunteer satisfaction (valid %) *n*=143

	Response by % of respondents						
Experience (Q9)	VERY DISSATISFIED 1	SOMEWHAT DISSATISFIED 2	NEUTRAL 3	SOMEWHAT SATISFIED 4	VERY SATISFIED 5	Mean	S.d.
1. My volunteer activities have been enjoyable.	1.4	2.7	2.1	37.7	56.2	4.5	0.8
2. My volunteer work has been rewarding.	0.7	1.4	4.8	43.2	50.0	4.4	0.7
3. I have had the opportunity to learn new things.	2.1	1.4	8.9	41.1	46.6	4.3	0.8
4. My volunteer work has helped the organization.	0.7	1.4	10.3	53.4	34.2	4.2	0.7
5. I experienced personal growth as a volunteer.	0.0	2.7	16.4	51.4	29.5	4.1	0.8
6. I felt like my volunteer work made a difference.	2.7	2.7	11.6	48.6	34.2	4.1	0.9
7. My volunteer work has had a positive impact on the environment.	1.4	0.7	32.2	38.4	27.4	3.9	0.9
8. People I am close to are happy that I volunteered.	5.5	1.4	46.6	29.5	17.1	3.5	1.0
9. The social aspects of volunteering are what I wanted.	4.1	5.5	43.8	31.5	15.1	3.5	1.0
10. Volunteering has helped me to feel more hopeful for the future.	4.1	4.1	40.4	37.0	14.4	3.5	0.9
11. I feel better about my environmental impacts.	3.4	4.1	48.6	32.9	11.0	3.4	0.9
12. This volunteer experience meets my career goals.	6.2	6.8	57.5	16.4	13.0	3.2	1.0
Organizational Aspects (Q10)							
1. The way the organization showed their appreciation for my work.	1.4	2.8	6.3	23.8	65.7	4.5	0.8
2. The quality of my volunteer leader.	2.1	4.2	8.4	23.1	62.2	4.4	1.0
3. My relationship with paid staff.	2.1	1.4	11.9	22.4	62.2	4.4	0.9
4. How often the organization acknowledged the work I did.	1.4	4.2	12.6	21.0	60.8	4.4	1.0
5. The freedom I had to work at my own pace.	0.7	1.4	19.6	21.7	56.6	4.3	0.9
6. The freedom I had in deciding how to carry out my volunteer assignment.	0.7	1.4	20.3	24.5	53.1	4.3	0.9
7. The availability of resources and materials I needed to complete my volunteer tasks.	0.7	7.0	18.9	22.4	51.0	4.2	1.0
8. The degree to which the organization communicated its expectations of me.	0.7	7.7	11.9	30.1	49.7	4.2	1.0
9. The availability of getting help when I needed it.	2.1	0.7	17.5	32.2	47.6	4.2	0.9
10. The clarity of communication between paid staff and volunteers.	2.8	4.2	16.1	31.5	45.5	4.1	1.0
11. The level of project organization.	3.5	8.4	9.1	36.4	42.7	4.1	1.1
12. The chance I had to utilize my knowledge and skills in my volunteer work.	2.1	7.7	12.6	39.9	37.8	4.0	1.0
13. The support network that was in place when I had volunteer-related problems.	1.4	2.8	35.0	22.4	38.5	3.9	1.0
14. How much the organization needed me.	1.4	4.2	21.7	44.8	28.0	3.9	0.9
15. The way in which the agency provided me with performance feedback.	2.1	5.6	37.1	25.2	30.1	3.8	1.0

4.2.3.1 Volunteer satisfaction statistical analysis

Factor analysis of the 27 satisfaction statements identified six factors influencing volunteer satisfaction with eigenvalues greater than one: *Organization Satisfaction* (9.686), *Individual Freedom* (2.895), *Personal Contribution* (1.569), *Environmental Impact* (1.334), *Intrinsic Rewards* (1.228), and *Personal Benefits* (1.062) (Table 4.16). Cronbach's alpha reliability scores are 0.92, 0.79, 0.80, 0.78, 0.67, 0.65 respectively. Of the 27 satisfaction variables, 12 make up the *Organization Satisfaction* factor. The other factors all consist of three variables. When the factors are reviewed using logic of association the individual variables do logically fit together. One possible exception could be "the opportunity to learn new things" which falls within *Intrinsic Rewards*. The variable could be a logical fit with *Personal Rewards*, however, it does not load closely within the factor.

Organization Satisfaction is determined by variables related to volunteer management, communication and overall volunteer support provided by the volunteer organizations. *Individual Freedom* reflects the desire of volunteers to have some degree of autonomy and personal agency in their volunteer environment. *Personal Contribution* relates to efficacy and a volunteer's desire to be needed by the organization. Satisfaction with *Environmental Impact* is achieved when volunteers feel like their volunteer work, and as a result their life, has a positive impact on the environment. *Intrinsic Rewards* relates to intrinsic satisfaction and intangible rewards derived from volunteering, such as learning new things. The final factor that can affect satisfaction is the ability of volunteering to meet *Personal Benefits* such as meeting career goals, personal growth and social expectations.

Table 4.16 Volunteer satisfaction factor analysis (Q 9 and 10)

	1	2	3	4	5	6
Organization Satisfaction						
The degree to which the organization communicated its expectations of me.	**0.70**	0.28	0.25	0.04	0.15	0.09
The quality of my volunteer leader.	**0.64**	0.19	0.28	0.10	0.14	0.15
The way the organization showed their appreciation for my work.	**0.52**	0.29	0.22	-0.05	0.48	0.18
The availability of getting help when I needed it.	**0.63**	0.37	0.03	0.34	0.07	0.06
My relationship with paid staff.	**0.58**	0.30	0.19	0.08	0.37	0.19
The support network that was in place when I had volunteer-related problems.	**0.54**	0.41	-0.11	0.34	0.07	0.02
The way in which the agency provided me with performance feedback.	**0.54**	0.38	0.09	0.37	0.11	0.08
The clarity of communication between paid staff and volunteers.	**0.73**	0.27	0.21	0.07	0.32	0.13
How often the organization acknowledged the work I did.	**0.73**	0.23	0.06	-0.03	0.33	0.10
The level of project organization.	**0.62**	0.10	0.44	0.03	0.25	0.16
The availability of resources and materials I needed to complete my tasks.	**0.47**	0.46	0.10	0.08	0.22	0.01
Individual Freedom						
The chance I had to utilize my knowledge and skills in my volunteer work.	0.26	**0.52**	0.25	0.26	0.16	0.07
The freedom to work at my pace.	0.06	**0.85**	0.17	-0.01	0.19	0.07
The freedom I had in deciding how to carry out my volunteer assignment.	0.06	**0.85**	0.22	0.06	0.18	0.17
Personal Contribution						
My volunteer work has helped the organization.	0.08	0.22	**0.80**	0.20	0.09	-0.02
I felt like my volunteer work made a difference	-0.09	0.16	**0.70**	0.33	0.35	0.10
How much the organization needed me.	0.27	0.15	**0.75**	0.06	0.12	0.20
Environmental Impact						
My volunteer work has had a positive impact on the environment.	-0.09	0.02	0.55	**0.63**	0.06	0.14
I feel better about my environmental impacts.	-0.02	0.08	0.29	**0.76**	0.08	0.13
My volunteer work has helped me to feel more hopeful for the future.	0.13	0.11	0.09	**0.60**	0.42	0.19
Intrinsic Rewards						
My volunteer activities have been enjoyable.	0.07	0.37	0.04	0.12	**0.74**	0.04
I have had the opportunity to learn new things.	0.18	0.01	0.17	0.46	**0.47**	0.16
My volunteer work has been rewarding.	-0.01	0.10	0.44	0.26	**0.65**	0.13
Personal Benefits						
People I am close to are happy that I volunteered.	0.09	0.05	0.06	0.22	-0.20	**0.76**
The social aspects of volunteering are what I wanted	0.04	0.06	0.05	-0.19	0.22	**0.75**
This volunteer experience meets my career goals.	-0.10	0.11	-0.03	0.45	0.09	**0.55**
I experienced personal growth as a volunteer.	0.07	-0.03	0.17	0.36	0.34	**0.50**
Cronbach's alpha	0.92	0.79	0.80	0.78	0.67	0.65
eigenvalues	9.686	2.895	1.569	1.334	1.228	1.062
% of variance explained	35.9	10.7	5.8	4.9	4.5	3.9

*Bold indicates factor grouping

Comparison of volunteer satisfaction, or rather dissatisfaction, with the seven identified volunteer types reveals interesting and unexpected results (Table 4.17). Other Helper volunteers with the least motives for volunteering had the highest ratio of unsatisfied volunteers (7 out of 21). Inversely, Budding Idealist volunteer who report the largest number of reasons for volunteering had the lowest ratio of unsatisfied volunteers (1 out of 29). Overall, volunteers expressed the most dissatisfaction with the personal benefits they receive from volunteering (*n*=15), the environmental benefits from volunteering (*n*=11) and their satisfaction with the organization (*n*=11).

Table 4.17 Cross tabulation of volunteer dissatisfaction with volunteer type (*n*=142)

	Number of unsatisfied respondents						
	Practical Environmentalist	Concerned Environmentalist	Career Environmentalist	Budding Idealist	Social Environmentalist	Other Helpers	Total
Organization Satisfaction	5	2	1	0	0	3	11
Individual Freedom	2	3	2	0	0	1	8
Personal Contribution	1	0	3	0	0	2	6
Environmental Impact	2	1	1	1	1	5	11
Intrinsic Rewards	2	0	1	0	0	1	4
Personal Benefits	4	4	3	0	1	3	15
Total unsatisfied respondents	9 (20.9%)	4 (19.0%)	4 (0.26%)	1 (0.03%)	2 (15.4%)	7 (33.3%)	27
Total respondents	43	21	15	29	13	21	142

4.1.4 Barriers to Volunteering

The third section of the volunteer survey asked respondents to indicate barriers that affect their ability to volunteer with the organization. For most respondents, "family or personal matters" was a major or minor consideration which influenced how much they could volunteer (83.1%) (Table 4.18). The number of respondents influenced by paid employment and school work was fairly split between being influential or not.

Table 4.18 Barriers to volunteering *n*=140

	Not a consideration	Minor consideration	Major consideration	Mean	S.d.
Time commitments to family or personal matters.	16.9	40.1	43.0	2.3	0.7
Time commitments to paid employment.	46.5	13.4	40.1	1.9	0.9
Time commitments to school work.	66.9	6.3	26.8	1.6	0.9
Time commitments to other volunteer activities.	43.0	40.8	16.2	1.7	0.7
Distance to volunteer location.	52.8	32.4	14.8	1.6	0.7
Lack of volunteer coordination (eg. Information regarding volunteer opportunities.)	74.6	20.4	4.9	1.3	0.6
Lack of encouragement or support from the organization	83.1	12.0	4.9	1.2	0.5
The demand volunteering places on my financial resources.	78.9	16.9	4.2	1.3	0.5
Feelings of frustration from perceived unimportance of volunteer tasks.	79.6	16.9	3.5	1.2	0.5
Lack of encouragement or support from other volunteers	86.6	12.7	0.7	1.1	0.4

Qualitative responses to volunteer barriers

Respondents were given two opportunities to present and discuss barriers that affect their willingness or ability to volunteer for the organization. For ongoing volunteers these barriers prevent them from increasing their volunteer activity. The initial way that respondents were able to present barriers that they identified as important was through two "other" fill in the blank spaces included with the list of barriers identified in question 14. This allowed respondents to briefly note a barrier and rate its importance without providing specific details. Following the Likert-style rating list of barriers, question 15 asked respondents to consider the barriers that keep them from volunteering more. Respondents were then asked to discuss things that the organization could do or change that would enable or encourage them to volunteer more. Manual coding of completed responses reveal five major types of barriers that organizations have little ability to change, and seven areas related to organization management and volunteer activities that should be considered by organizations wanting to improve volunteer programs.

Other barriers

Respondents listed five major barriers to volunteering that organizations have little to no ability to change. *Other recreation activities*, such as sports, hobbies, religious activities, and other volunteer commitments compete for volunteers' limited leisure time. *Day to day living* and survival, such as looking for work, employment, and family commitments are priorities above volunteering. The *physical location* of volunteer activities can present a barrier to volunteering if the time required to reach the site is too long, or if the site is not easily accessible by bike/bus for volunteers who do not drive. As well, the cost of gas required to access volunteer sites was given as a barrier by a volunteer who does drive. *Personal health* of volunteers, such as chronic illness and age related declining physical ability prevent some individuals from engaging in volunteer activities requiring physical exertion or sustained activities over prolonged periods. Uncomfortable noise levels were also listed by one respondent as a barrier to increased volunteering. Finally, life circumstances sometimes result in volunteers *moving to other cities or locations* where they are no longer able continue volunteering.

Activity and organization related barriers

Several barriers that respondents identified as potential areas for future improvement are able to be categorized as either activity related barriers or organization/ management related barriers.

Activity related barriers include perceived lack of safety at volunteer site.

> "Safety issues as a result of working alone in an area that was sometimes deserted."
> "For areas that may be unsafe, perhaps volunteers could work in pairs."

The perceived lack of importance of volunteer activities, or insufficient activities to maintain interest discourage some volunteers from volunteering further.

> "Lack of importance of my position"
> "More specific tasks for volunteers. Let the paid staff know when we're in so they can have material ready."
> "Help paid staff understand and better utilize the contribution of volunteers."

Costs assumed by volunteers, most often related to transportation, can dissuade volunteers who already feel that they are giving their time and are unable to or unwilling to also contribute financially.

> "Offer telecommuting options, offer gas compensation if commuting is required."
> "I am a working student so my time and finances are challenged but I have much to offer in skills and so the cost of gas can be a factor as well as the additional time away from home, etc."

While people may want to help an organization, the volunteer activities available may not match personal interest or skills.

> "Haven't seen too many opportunities that are available in a way that I want to volunteer."
>
> "Much of the work required by the organization at this time is out of my realm of experience."
>
> "More volunteer opportunity. I feel my knowledge (studying geography 4th year) could be better used for more difficult tasks."

Increased flexibility of volunteer opportunities would enable some volunteers to overcome barriers related to time availability.

> "More volunteer time allocated during non-business hours. (ie, not M-F 9-5)"
>
> "I might have volunteered more had I been notified about more opportunities, especially those with flexible hours and time commitments, which are convenient for student lifestyles."

Management

Beyond volunteer activities themselves, the relationship between volunteers and organizations is essential to the volunteer experience. Incompatibility between volunteers and volunteer managers, and perceived lack of professionalism of paid staff can create a social barrier to volunteering.

> "There were many very great people (my immediate supervisor), but was not impressed with some newer staff. A tendency to hire "unprofessional" perhaps "flakey" "green-types" rather than competent professionals."
>
> "Social problems with the organization/ protectiveness over pet project prevents its success."

Communication

In some cases volunteers did not feel fully informed about their volunteer options and opportunities.

> "Maybe sending out a newsletter (not too often), letting people know what tasks could be done, asking volunteers for ideas, making events for volunteers to get together – to work together, then just hang out together."
>
> "If I receive more information I will volunteer more."

Multi-tasking leisure activities.

Volunteering is a leisure activity and has to compete with other priorities and interests to attract individuals. Creating opportunities for individuals to "multi-task" and engage in activities that meet more than one leisure interest while volunteering may attract more volunteers.

> "Something that can include my dogs, family and friends so that I may do 2 things at once, ie. volunteer and spend time with my loved ones."
>
> "If [the organization] organized a bus that would pick up volunteers in the morning, brought all of them to the location where they would volunteer, then facilitated and end of day meal or gathering around refreshments, it would make volunteering resource efficient, easy, sociable, rewarding in several ways, and fun."

Volunteer training

Opportunities for personal growth and learning through training was identified as a method of increasing volunteer interest in activities.

> "I would like to have volunteer education evenings about native and non-native plants and animals."
>
> "Allow more work shops, training, retreats."

"They could add a knowledge component to the work ie. Identifying plants and instituting a mapping and record keeping record of the garden which I could work on."

4.1.5 Long term commitment

The final questions found in the barriers portion of the questionnaire were related to volunteer commitment and future volunteer intentions (Table 4.19). Inactive volunteers were asked to rate how likely they were to return to volunteer within the next 12 months. Most respondents (44.4%) were very likely to volunteer or somewhat likely (14.3%) to return, while 11.1% were unsure and 29.6% were somewhat or very unlikely to return.

Table 4.19 Non-active volunteers, likely to return?

	Frequency	Valid %
Very Unlikely	13	20.6
Somewhat Unlikely	6	9.5
Not sure	7	11.1
Somewhat Likely	9	14.3
Very Likely	28	44.4
Total answered	63	100.0

Active volunteers were asked to anticipate their future volunteering compared to the past 12 months (Table 4.20). Most felt that they would volunteer about the same amount (56.9%) while 11.2% would volunteer less, 22.4% would not volunteer and 9.5% were unsure about their future volunteering availability.

Table 4.20 Active volunteers, future volunteering?

	Frequency	Valid %
Volunteer less	13	11.2
About the same	66	56.9
Will not volunteer	26	22.4
Not sure	11	9.5
Total answered	116	100.0

4.2 Organization Interview Results

While the barriers to volunteering, and areas of satisfaction/dissatisfaction are important to understand in order to improve volunteer retention, organizations have their own limits and abilities related to maintaining volunteer programs. The following section looks at volunteer management and retention from the perspective of environmental organizations. The ten organizations that actively allowed recruitment of their volunteers for this study also agreed to participate in an interview regarding their volunteer management practices and use of volunteers. A questionnaire consisting of nineteen yes/no, multiple option, Likert-style and open ended questions was administered during in person or phone interviews. The interview participant for each organization was either a designated volunteer coordinator or, for organizations without a designated volunteer coordinator, an employee who is regularly in charge of volunteers.

4.2.1 Volunteer management resources

In order to gain an understanding of how volunteers are managed within participating organizations the survey asked whether or not each group had a designated volunteer coordinator and what percentage of the organization's operating budget was designated to volunteer management including designated volunteer manager salary, recruitment, training, recognition events etc. Eight out of ten organizations had a volunteer coordinator to some degree either as a stand alone position, or designated as part of a larger job description. Two organizations did not have a designated coordinator, but rather left staff members to organize their own volunteers as needed.

The effectiveness of communication between organizations and volunteers, as well as volunteer recruitment, training and coordination of volunteers can be affected by the existence of a designated volunteer coordinator. Having a coordinator can help by keeping volunteers informed of the range of opportunities available within the organization. On the other hand, having a designated coordinator requires extra

communication between paid staff members so that the coordinator is aware of the various roles that can be filled by volunteers. While organizations have chosen the management style that works best for them, it is important to recognize that each has its own weaknesses.

The percent of operating budget designated for volunteer management was difficult for some organizations to assess because some aspects of volunteer programs are linked to different budget areas. Budget allocations for those organizations with allocated volunteer funds had a range of 0 to 75% of their annual operating budget set aside for maintaining their volunteer programs. Two organizations do not designate funds specifically for volunteer management, three organizations designate approximately 2-5.5% of their budget, two designate 25-75% and three organizations were unable to provide budget information. The wide range reflects variations in organization operating costs rather than the degree of importance assigned to volunteers. For example, the organization that allocates 75% of its budget to volunteers has public stewardship and participation in environmental conservation as its principal objective and has minimal overhead costs. Another organization which allocates 5.5% of its budget to volunteer management depends just as heavily on volunteers but has high staff, program and maintenance expenses.

4.2.2 Volunteer use

Each organization was asked how many individuals volunteered with them in the past year, and how many volunteer hours were completed with the organization in the past year. The total number of volunteers ranged from 20 to 300 volunteers. Five groups reported having between 20-90 volunteers, four groups had between 150-200 volunteers and one group had 300. Total hours volunteered over the past year ranged from 200 hours to 10,000 hours. Two groups received less than 1000 volunteer hours, four groups received between 1000 to 2000 hours, and three groups between 6000 and 10,000 hours, one group did not know how many volunteer hours had been completed. The average

number of hours completed per volunteer during the year ranged from 9.5 hours to 42 hours. Five organizations had volunteers that each gave an average between 9.5-11.2 hours a year and four organizations had volunteers that each gave an average number of hours between 27-42 hours.

A list of eight different volunteer task categories was presented to assess the volunteer needs of each organization. The organizations were asked to indicate what percent of volunteer hours was used for each purpose (Table 4.21). The number of different types of volunteer tasks available ranged from four tasks (three organizations) to all eight tasks (one organization).

All participating organizations reported using volunteers for community outreach and education, four of which used at least 25% of their volunteer hours for this purpose. The major use of volunteers for contact with the public represents a trust that volunteers will properly represent the organization and message being promoted. The next most common volunteer task was conservation or restoration field work with four organizations using at least 25% of volunteer time for these tasks. Actively engaging volunteers in conservation and restoration not only immediately impacts the environment, but also increases community awareness of and personal connection to conservation projects.

Fundraising events and events that are part of larger awareness campaigns require extra labour for a short period of time. While volunteers are useful for meeting increased labour needs during these events, event organization and planning and short term event assistants did not occupy 25% or more of volunteer time for any organization. This is likely a reflection of the fact that the participating organizations do not focus their environmental efforts around hosting events.

At least 25% of volunteer hours were used by two organizations for occasional administrative support and by one for regular administrative support with six and five organizations respectively using volunteers for these purposes to some extent. Two organizations used volunteers for non-event fundraising with none using at least 25% of

volunteer hours for this task. Future research should consider looking at why organizations do not utilize volunteers more for functional volunteer activities such as administrative support and fundraising. While volunteers are trusted to relate to the public at large, are they equally trusted to interact with potential funders? Does the amount of training or specialized skills required to undertake administrative tasks make using volunteers prohibitive? Are administration and fundraising considered to be tasks better suited to paid employees?

Table 4.21 Reported frequency of use of volunteers for designated task areas

Volunteer task	Number of organizations that used volunteers to some extent	Number of organizations using at least 25% of volunteer time for task
Community outreach and education	10	4
Short term event assistant	8	0
Conservation or restoration field work	6	4
Occasional administrative support	6	2
Event organization and planning (leadership role)	6	0
Regular administrative support	5	1
Research and monitoring	4	1
Non-event fundraising	2	0
Other	8	0

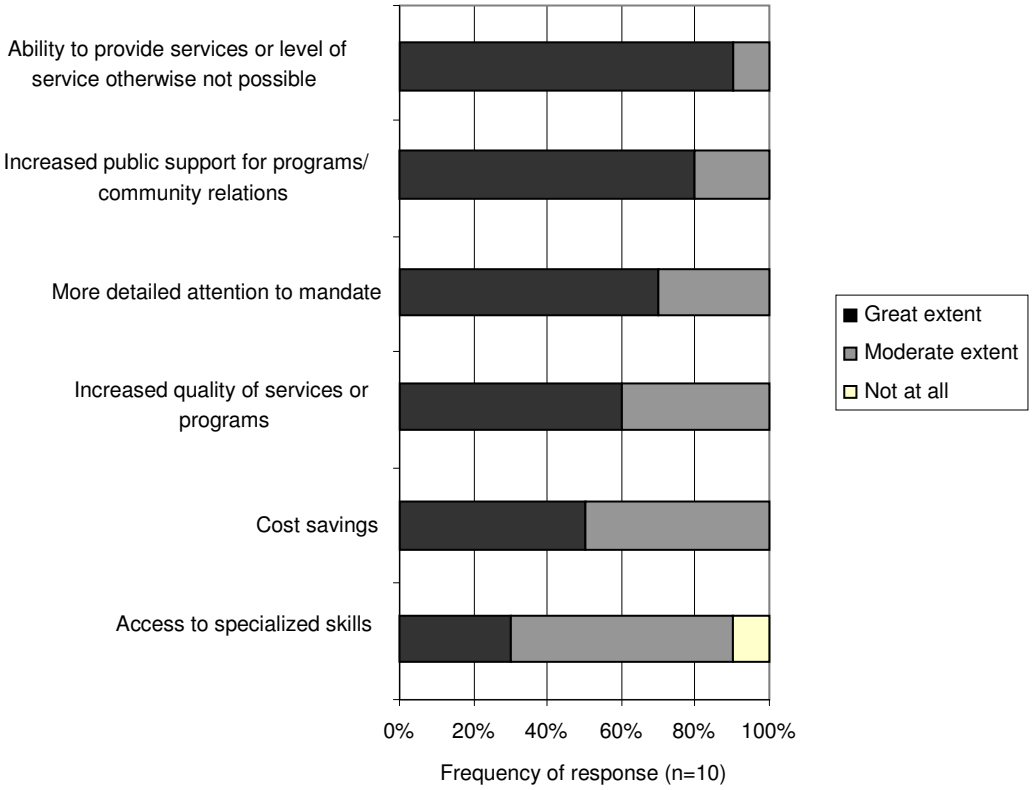
Eight out of ten organizations reported using volunteers for purposes other than the eight listed, however none of these tasks was a was a major volunteer focus. Reported other tasks include: trail building, board members, gate keepers, volunteer recruitment, site maintenance, library organizing, animal care, educational display creation, and customer service/cashier. Trail surveying was the only other task that was reported as taking more than 25% of volunteer time.

4.1.3 Benefits of using volunteers

The benefits of using volunteer labour are as varied as the different volunteer tasks available. Hager and Brudney (2005) created a list of six potential benefits to organizations that may be derived by using volunteers: ability to provide services or level of services otherwise not possible, increased public support for programs/community relations, more detailed attention to mandate, increased quality of services or programs, cost savings, and access to specialized skills. Organizations were asked to rate whether they benefited to a "great extent," "moderate extent," or "not at all" by using volunteers in relation to each potential benefit (Figure 4.7).

All organizations agreed that volunteers provided a moderate to great benefit for each potential benefit except "access to specialized skills" which was not at all beneficial to one organization. The ability of organizations to provide services or increased level of service because of volunteer effort was greatly experienced by all organizations except one which felt volunteers were only moderately beneficial in this area. Over half of the organizations found that volunteers were greatly beneficial to increasing public support for programs and community relations, their ability to pay more attention to their mandate, and to increasing the quality of services or programs. While cost savings was at least a moderate benefit to all the organizations, it is overall the second least important benefit derived by using volunteers.

Figure 4.7 Benefits associated with the use of volunteers



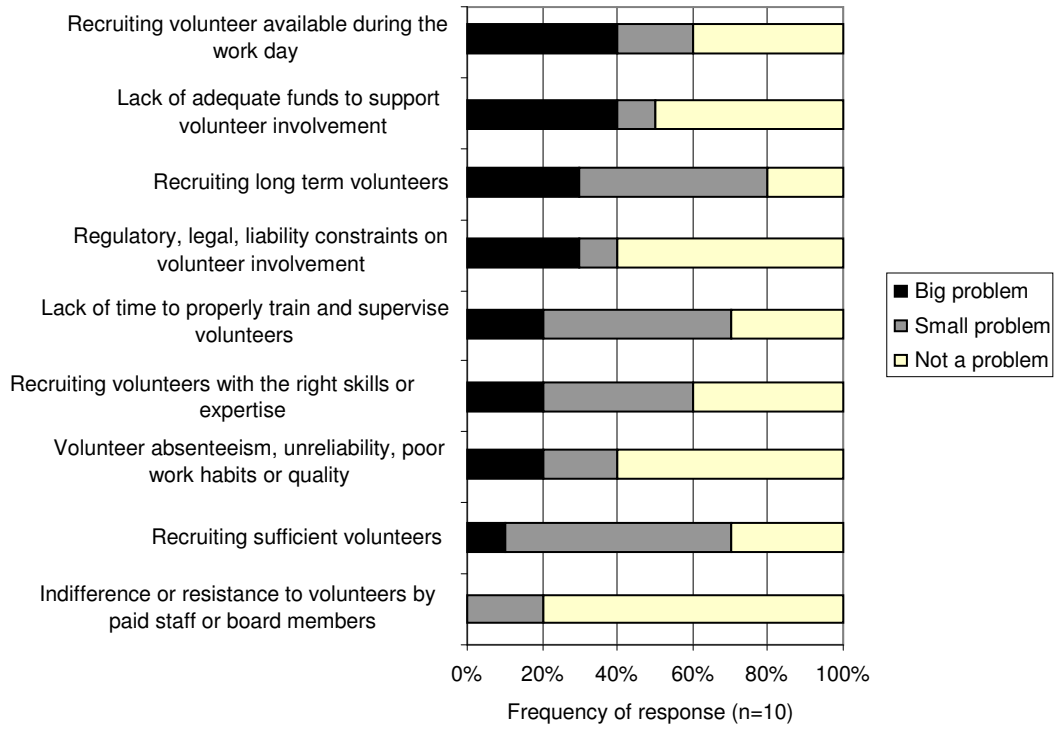
4.2.4 Challenges presented by using volunteers

Coupled with the benefits of incorporating volunteers into organizations are the challenges that organizations face in recruiting and managing volunteers. A list of nine volunteer related issues that can present problems or challenges for organizations was compiled by Hager and Brudney (2005). Each organization was asked to rate if each potential problem was a big, small, or not at all a problem for their organization. Most organizations reported having big problems in two of nine areas with about three or four small problems (Figure 4.8). One organization reported that five items are big problems plus one small problem while another organization reported that it has five small problems and no big problems.

Recruiting volunteers who are available to work during the day and lack of adequate funds to support volunteer involvement were the two most commonly listed major challenges. Recruitment of long term volunteers was overall the most commonly listed problem with three organizations finding it to be a big problem and five organizations a small problem. Lack of time to properly train and supervise volunteers was the second most commonly listed problem overall with two organizations listing it as a major problem and five as a small problem.

As some activities can be potentially dangerous, regulatory, legal, and liability constraints were found to be a big problem for three organizations and a small problem for one. Recruiting volunteers with the right skills or expertise and volunteer absenteeism, unreliability, and poor work habits or quality are problems that depend entirely on the quality and commitment of individuals recruited to volunteer. Recruiting volunteers with the right skills was a big problem for two organizations and a small problem for four. Four organizations found that volunteer absenteeism, unreliability, and poor work habits or quality was a big (two organizations) and small problem (two organizations). Difficulty recruiting sufficient volunteers is a more common problem overall than finding skilled and reliable volunteers as one organization found it to be a big problem and six listed it as a small problem. Finally, indifference or resistance to volunteers by paid staff or board members was the least common problem with two organizations reporting that it is a small problem.

Figure 4.8 Challenges of using volunteers



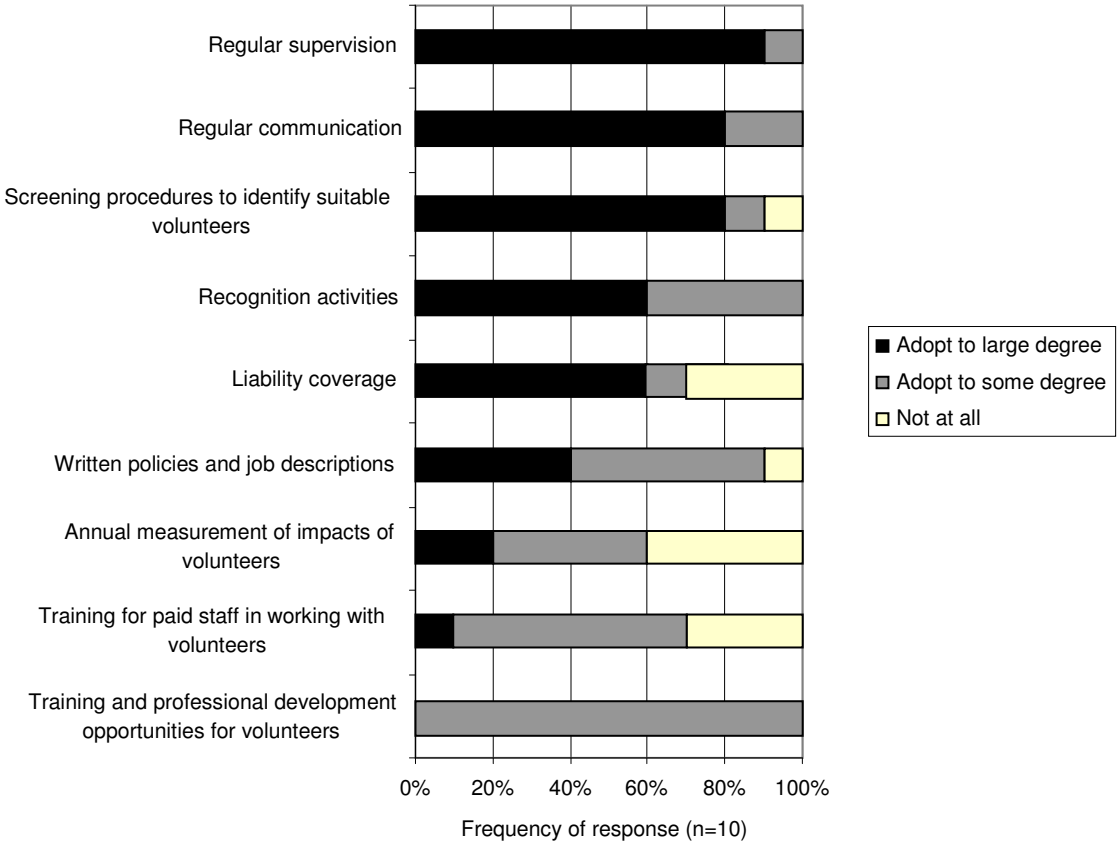
4.2.5 Volunteer management practices

The volunteer management practices utilized by organizations will influence their capacity to effectively incorporate volunteers into programs and maintain satisfied volunteers. A list of nine management practices was adapted from Hager and Brudney (2004) and organizations were asked to indicate whether they adopted each practice to a "large degree," "to some degree" or "not at all" (Figure 4.9).

All organizations reported adopting regular supervision, communication, recognition activities, and training and professional development opportunities to at least some degree. Only one organization did not have any screening procedure set up to identify suitable volunteers and one organization did not have any written volunteer policies and job descriptions. Annual measurement of volunteer impacts was the least commonly

adopted management practice with only two organizations adopting measurement to a large degree, four to some degree, and four not at all. Liability coverage for volunteers and training for paid staff in working with volunteers were the second least incorporated practices with three organizations not implementing each. Training for paid staff in working with volunteers is only adopted to a large degree by one organization and to some degree by six organizations.

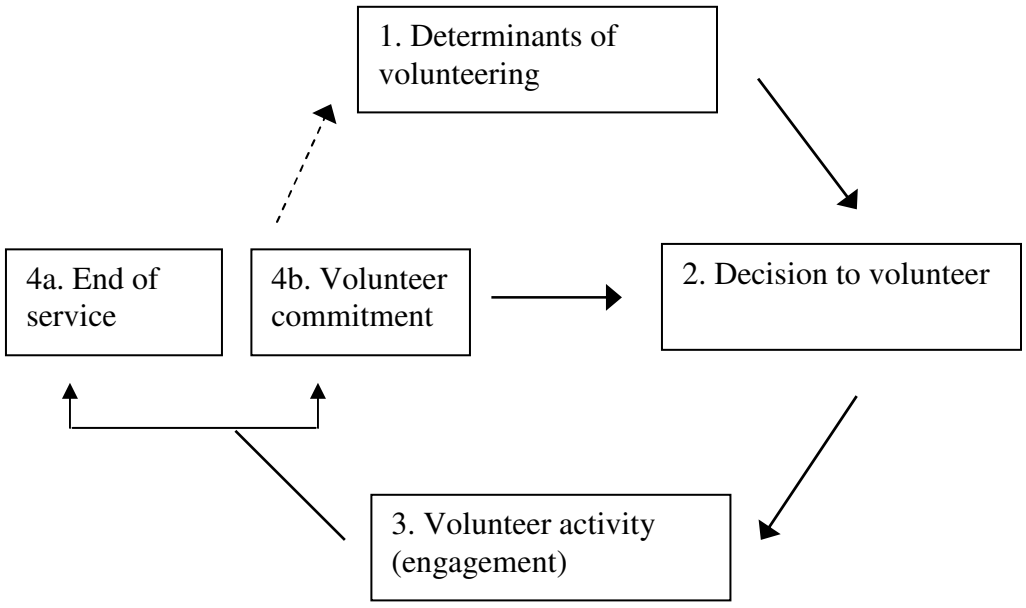
Figure 4.9 Frequency of management practice implementation



5.0 Discussion and Conclusion

The purpose of this is chapter is to review and discuss the results of this study in relation to current volunteer literature. Discussion is organized in relation to the contributions the research makes to better understanding the four stages of the Volunteer Life Cycle model (Figure 5.1) (Bussel & Forbes, 2003). Volunteer motivations identified contribute to understanding stage one, determinants of volunteering. Factors which support volunteer motives are discussed as part of stage two, decision to volunteer. A description of volunteers and their roles within environmental organizations is presented for stage three, volunteer activity. Volunteer satisfaction, barriers to volunteering, and volunteer retention are discussed as part of stage four, volunteer commitment/end of service, along with organization management practices. Recommendations for increasing volunteer retention and volunteer involvement will be addressed. Finally the strengths and limitations of this study will be discussed along with recommendations for future research.

Figure 5.1. Volunteer Life Cycle from Bussel and Forbes (2003)



Within environmental nonprofit organizations volunteers perform immensely important activities such as habitat restoration, environmental education, and administrative support. Organizations, however, face costs associated with recruiting, training and maintaining volunteers. Low volunteer retention rates can divert organization resources from important tasks and projects. Research and experience show that volunteers are more satisfied and more likely to continue with an organization when personal motives for volunteering are being met by their experience (Clary et. al., 1998). Through improved understanding of volunteer motivations, satisfaction, and barriers to volunteering, organizations can better design and run volunteer programs which will increase volunteer retention and maximize the benefits to both the organization and volunteers.

Three main pieces of volunteer research were used to develop this study in addition to support and insight from a number of environment and conservation volunteer research. The VLC model was used as a framework to outline the stages of volunteering that affect volunteers as they begin volunteering and eventually stop volunteering. The Volunteer Motivation Index (VMI) (Clary et al., 1998) was adapted to incorporate more recent environment and conservation volunteer literature in order to identify the most prominent motivators among environmental volunteers. The Volunteer Satisfaction Index (VSI) (Galindo-Kuhn & Guzley, 2001) was adapted using environmental volunteer literature to help organizations recruit and maintain satisfied and effective volunteers. Barriers to volunteering were explored with questions derived from previous research into environment and conservation volunteer retention (Donald, 1997; Martinez & McMullin, 2004; Ryan et al., 2001).

This research is unique because it focuses exclusively on environmental volunteers and draws participants from 17 different environmental organizations operating in the Victoria, British Columbia, Capital Regional District (CRD). A standardized survey, available in both paper and electronic format over the Internet, was created to reach past and present volunteers from a range of different volunteer roles. The survey consisted of a collection of multiple option, Likert-style and open-ended questions relating to

respondents' volunteer role, motivation, satisfaction and barriers to volunteering. Development of the questions was guided by general literature on volunteer motivation, satisfaction, and retention (Bussell & Forbes, 2003; Clary et al., 1998; Galindo-Kuhn & Guzley, 2001) as well as studies specific to environmental and conservation volunteers (Donald, 1997; Kidd et al., 1996; Martinez & McMullin, 2004; Ryan et al., 2001). The results and analysis of this research are presented in detail in chapter 4.

5.1 Review and discussion of results

5.1.1 Determinants of volunteering - Understanding Volunteer Motivation

The first stage in the VLC starts when an individual begins contemplating his or her potential role as a volunteer (Bussel & Forbes, 2003). The reasoning, or motives, that drive interest in volunteering are varied and range from a largely extrinsic desire to help to a desire to receive personal benefits through volunteering. Past quantitative volunteer motivation studies using factor analysis included 25 (Omoto & Snyder, 1995) or 30 (Clary et al., 1998) statements for volunteering which identified five and six different motivation factors respectively. Queries into volunteer motivation are ongoing. As research narrows to focus on specific groups of volunteers and volunteer organizations, new motives unique to certain groups come to light. In order to include known potential motives that relate to environmental volunteers, this study utilized 35 motivation statements. Through factor analysis of survey responses, environmental volunteers were found to be motivated by nine factors:

1. Environmental Values
2. Intrinsic Satisfaction
3. Efficacy
4. Protective
5. Personal Growth
6. Social Interest
7. Career
8. Independence
9. Social Norms

Four new motivation factors were not identified in previous quantitative studies.

Efficacy, Intrinsic Satisfaction, Social Interests, and Independence were identified in this study as new motives that were not part of either study by Omoto and Snyder (1995) or Clary et al. (1998). The different results between this study and others are likely due to two reasons – the type of volunteer studied and inclusion of previously missing motives.

Intrinsic Satisfaction and Efficacy are the second and third most frequently indicated motives among volunteers in this study. Neither of these motives can be considered unique to volunteering with environmental organizations, yet they are not found in general volunteer motivation literature such as Clary et al. (1998) and Omoto and Snyder (1995). Despite their absence from non-environmental volunteer studies, the importance ranking of these two motives does fit with environmental and conservation volunteer studies which found that volunteers attracted to intrinsic rewards (Ralston & Rhoden, 2005) and the perceived efficacy of their work (Ryan et al., 2001; Martinez and Mcmullin, 2004). Both Intrinsic Satisfaction and Efficacy should be considered in future volunteer motivation researcher.

Part of the Efficacy motivation identified in this study came from a different emphasis on wording from statements used in previous studies. Clary et. al. (1998) focus specifically on the personal benefits that volunteering plays in a volunteer's life. One example is the statement "Volunteering makes me feel needed" which is found to fulfill one's need for personal enhancement. Emphasis in this study changed the wording to reflect an extrinsic influence on the person's decision. "I felt the organization needed me." This represents a desire to fulfill the organization's need rather than the volunteer's need to be needed. It is important to distinguish between these two different needs. Clary's need is personal and makes the volunteer feel better. Being needed in the context of this study can influence a volunteer to become active even if they have other potentially more satisfying things to do. Feeling needed becomes an extrinsic motivator based on feelings of personal responsibility, obligation or guilt rather than personal self worth. In the context of this

study's wording, if volunteers were not needed they would move on to a more enjoyable or more urgently pressing activity (leisure pursuit or other commitment).

Social Norm and Social Interests were identified as two separate factors whereas previous research combined them into one motivator (Allison et al., 2002; Clary et al., 1998). This study has emphasized the difference between acting under the guidance and direction of one's pre-existing peers and seeking out new friendships and social opportunities. These could alternately be considered push and pull factors where existing relationships may push or lead while potential new relationships attract and draw individuals to volunteer.

The Independence motive was identified as a motivator among a small number of environmental volunteers. While only 14.2% of respondents were motivated by the freedom they had as a volunteer, it should not be discounted when recruiting volunteers or planning for future research. The ability of volunteers to purposefully engage or not engage in an activity gives them power not often found among paid employees (Liao-Troth, 2001; Pearce, 1983). Certain volunteer roles may specifically attract individuals seeking the opportunity to carry out their own vision for a project. From another angle, volunteers know their personal limits and abilities. Having freedom to choose how and to what extent they carry out their tasks may be important to those who want to participate but who do not want to feel pressured to go beyond their personal abilities.

Environmental Values, Intrinsic Satisfaction, and Efficacy were the three most frequently identified motivators.

Previous studies have identified motives for volunteering; however, the importance of each motive, or frequency of response, among volunteers has not been addressed. This study found that Environmental Values, Intrinsic Satisfaction and Efficacy were the three most commonly identified motivators with over 2/3 of respondents being motivated by each. With 88.5% of respondents motivated by Environmental Values, the majority of volunteers were intentionally engaging in environmentally significant behaviour. The high ranking of Intrinsic Satisfaction and Efficacy supports the idea that the volunteer

relationship with the organization needs to be mutually beneficial. Not only do volunteers want to enjoy and feel good about their participation, but they also want to be useful and make a difference.

Most volunteers have multiple motives for volunteering.

The unique nature of individual volunteers is apparent when one considers that survey participants report being motivated by a range of as little as no motives (two respondents) to 8 different influential motives (three respondents). The fact that two respondents identified no motives means that there must be at least one further motive for volunteering that has not yet been identified.

Volunteers can be meaningfully grouped based on their volunteer motives.

From the motives identified it is possible to see that volunteers are not purely intrinsically or altruistically motivated, yet they are not entirely extrinsically motivated either. An exploratory cluster analysis was conducted to determine if volunteers could be meaningfully grouped according to their motives to volunteer. Six clusters of volunteers were identified as representing the major types of environmental volunteers. These six types were: Practical Environmentalists; Concerned Environmentalists; Career Environmentalists; Budding Idealists; Social Environmentalists; and Other Helpers. The inclusion of intrinsic and extrinsic motives among five of the six clusters supports the notion that volunteers are looking for a reciprocally beneficial relationship with their organization.

All volunteer types want to enjoy their volunteer experience

Common among all volunteer types is the importance of Intrinsic Satisfaction which supports the idea that volunteering is a leisure activity that provides enjoyment. This raises an important question for volunteer researchers. Why has Intrinsic Satisfaction been missing from past research?

It is important for organizations to realize that, despite the best intentions of volunteers and volunteer desire to help the organization and/or the environment, the majority of volunteers are looking for an intrinsically satisfying experience. As a result, difficult or seemingly unpleasant volunteer roles will be difficult to recruit for and are more likely to have low volunteer retention rates. Increasing effort to emphasize the importance of unpleasant activities while seeking out opportunities to show volunteers how their work is helping and is appreciated may help increase intrinsic satisfaction.

Environmental volunteers are motivated by their Environmental Values and the perceived Efficacy of their contribution.

Also common to all the volunteer types, with the exception of Other Helpers, were Environmental Values and Efficacy. The defining factors that differentiated volunteer types were: Career, Personal Growth, Protective, and Social values.

- *Practical Environmentalists* want to know that they are important to the organization and that their contribution makes a difference.
- *Concerned Environmentalists* seek hope and personal growth through volunteering.
- *Career Environmentalists* want their volunteer work to be useful to the organization with the reciprocal benefit of gaining career experience or contacts.
- *Budding Idealists* have high expectations of the volunteer experience as they are highly motivated by every factor except Social Norms and Independence.
- *Social Environmentalists* want the opportunity to socialize while engaging in meaningful activities.
- *Other Helpers* represents a group of individuals who share their desire to find personal reward and satisfaction in helping others.

Volunteer types identify the most common groupings of volunteer motives, but ultimately each volunteer has a unique set of motives for volunteering. Organizations with a wide range of volunteer opportunities will be better able to find tasks that satisfy more volunteers.

5.1.2 Determinants of volunteering – Qualitative results

Volunteer motivation is multi-dimensional and goes beyond basic intrinsic and extrinsic motives.

Qualitative analysis of open ended responses to why people began to volunteer found three new motivation factors: Community Integration, Location, and Other Benefits. Volunteer motivation was found to be multidimensional. This means that an individual's decision to volunteer is influenced not only by intrinsic, extrinsic, and supporting factors but also by sub-factors and task attractants. The addition of two motives labelled as supporting motives highlights the fact that not all motivating factors have a push (extrinsic) or pull (intrinsic) component to them. Rather, Independence and Location are important as they facilitate the ability for people to engage as volunteers. Furthermore, attracting factors which are categorized into project/place, issues, organization, and activity, ultimately enable a volunteer to select one organization or opportunity over another.

Volunteer location affects volunteer motivation.

Two motivation factors that were not addressed in the quantitative questions, yet were often mentioned in the open ended responses were Community Integration, a desire to connect to place and local community through volunteering, and the importance of Location of the volunteer activity. Community integration was mentioned by new and visiting Victoria residents as a way to get to know others in the community with similar interests and values while also learning about the community and local environmental issues. These friendships that form around a common vision are essential to maintaining a strong community commitment to environmental protection.

Several individuals mentioned that their volunteer activities are close to home. While the convenience factor is obvious, research on environmentally responsible behaviour (ERB) has found that individuals are more likely to engage in ERB if they can clearly identify a

problem, if they identify that there is something they can do to help solve a problem, and if they are willing to accept responsibility for taking action (Kaplan, 2000). Projects close to home are more prominently visible and it is easier to make a link to personal responsibility and personal benefit from action. Some respondents emphasized the importance of engaging in activities within Victoria or within the province of British Columbia.

Volunteers can derive personal benefits for volunteering indirectly related to volunteer activities.

Qualitative analysis resulted in the creation of a third new factor, Other Benefits, as a way to combine a range of personal benefits that had been mentioned by volunteers. The two main benefits mentioned were physical exercise and having something to do. Some volunteer activities require volunteers to engage in outdoor activities, such as gardening or monitoring park activities. By making a commitment to engage in these activities on a regular basis people were also making a commitment to themselves that they would be getting fresh air and exercise. Volunteering was a way to ensure that personal goals were met while also engaging in meaningful activity.

5.2 The decision to volunteer

Once a potential volunteer has developed a set of motives that drive them to look into volunteering they move to the second stage of the VLC and decide to pursue volunteering.

Understanding volunteer motivation in order to attract volunteers and to maintain their involvement requires organizations to consider and address the multiple dimensions of intrinsic, extrinsic and supporting motivations along with their associated attractants.

Previous research by Clary et al. (1998) and Omoto and Snyder (1995) approached volunteer motivation from a functional perspective, as in the functional role that volunteering satisfied in people's lives. While these studies did identify factors that motivate individuals to volunteer, results of this study indicate that volunteer motivation needs to be viewed from a wider perspective than solely from a functional view. Beyond the functional intrinsic and extrinsic motives that drive people to want to volunteer, supporting motives facilitate engagement in volunteer activity while attractants ultimately help individuals to decide where they want to volunteer and what tasks interest them.

Four attracting factors affect one's decision to volunteer:

- *Project/place* relates to a personal or emotional attachment to a specific place, or a project such as a historical restoration.
- *Issue* refers to a particular environmental issue, such as saving grizzly bears or protecting old growth forests.
- *Organization*'s reputation or connections through friends and family involved with the organization can draw volunteers.
- *Activities offered* such as working with children, or office work are essential to attracting certain volunteers.

These attractants help volunteers decide where they want to contribute their time. When recruiting volunteers organizations should have outlines of their volunteer opportunities to highlight the connection between the opportunities available and potential attracting factors.

Supporting motivations are those that may not drive initial motivation to volunteer, but they are important in encouraging an individual to decide to volunteer. The Independence factor identified through factor analysis fits better as a supporting motive than extrinsic motive. The flexibility one has when undertaking a project has been shown to be important to some people, but it is not enough of a motive on its own to encourage someone to volunteer. Likewise, the location of volunteer activities can enable an

individual to volunteer or it can become a barrier which prevents an individual from volunteering.

5.3 Engaging in volunteer activity - the environmental volunteer profile

Once an individual has selected and organization and has found an interesting volunteer opportunity he or she begins volunteering and enters the third stage in the VLC.

Environmental volunteers in Victoria, BC, could not be easily profiled or lumped into one distinct group. Based on survey responses more females volunteer than males (59.3% and 40.0% respectively). This fits with the results of the Statistic Canada's 2000 survey on Canadian volunteering where 28% of women were likely to volunteer compared to 25% of men (Hall et al., 2001). A large percentage of respondents had completed an undergraduate or graduate degree (59.8%) and have some type of employment (42.1%), which also fits with the general survey of Canadian volunteers which found well educated and employed people are more likely to volunteer.

The high percentage of student (22.9%) and retired (27.1%) volunteers is potentially a reflection of the city's demographics. Victoria's mild coastal climate and natural scenery attracts retirees. Likewise, the presence of two universities, and a number of colleges and institutes bring an annual migration of young adults to the area. Employed, retired, and student volunteers represent the three major groups based on individuals' stage-in-life. The identification of these three groups is important because each group can be linked to specific motivations, needs and barriers as will be discussed. Further research would benefit from looking more specifically at volunteering from each of these three stages in life.

5.3.1 Volunteer Time Commitment

Environmental volunteers engage in a mix of long term and episodic volunteer activities. Just over half (53.7%) of volunteers who participated in this study volunteered on a set schedule over a long period of time with the rest (46.3%) volunteering for short term projects, occasionally as needed, or for regular annual events. While this study found that recruiting long term volunteers is the most commonly identified challenges of using environmental volunteers, there are many benefits to creating episodic volunteer positions. The availability of flexible and/or short term volunteer commitments allows more people with busy schedules to become volunteers. Short term opportunities also allow individuals to test out an organization to see if they would like to volunteer on a regular basis.

Short term projects and annual events that use volunteers tend to be seasonal such as school presentations, weed pulls, and annual fundraisers. The challenge of retaining these short term volunteers from one year to the next is that individuals may become disconnected from the organization once the project or event is over. Organizations are potentially faced with the need to constantly recruit and train new volunteers each year because it is difficult to stay connected with irregular volunteers who can easily become committed to other activities. In order to maintain relationships with episodic volunteers organizations should consider other ways that individuals can remain involved once a project is finished. Inform volunteers of when the next project will begin. Inform them of other short term or long term opportunities within the organization which volunteers can move into. Even hosting social events for volunteers, such as a thank you potluck can help keep volunteers connected to the organization and to each other so that they remain eager to volunteer again in the future.

It is important to consider that short term environmental volunteers may have been attracted by the short term opportunity may not want to contribute more. In this case organizations need to reflect on why they are using volunteers for short term projects. Is the goal to save money on staff, or to involve community members in environmental

projects? If the goal is to involve community members then environmental volunteer turnover can be seen as a benefit because it introduces new people to an organization and its environmental goals.

5.3.2 Volunteer Activities

Within organizations, environmental volunteers were found to engage in at least one of nine different activities: community outreach/education, short term event assistant, conservation or restoration field work, regular administrative support, research and monitoring, event organization/leadership, occasional administrative support, non-event fundraising, and other (including grounds keepers, advertising outreach etc. see table 4). These activities can be grouped into three roles: a functional role that directly relates to the day to day maintenance of the organization; an outreach/education role that is responsible for community contact such as educational booths at community events; and a direct conservation role where volunteers are directly interacting with nature to ensure an area is protected or for restoration purposes.

Volunteers are more likely to be used for outreach and education purposes or direct conservation than for the day to day functioning and administration of environmental organizations.

Among the organizations participating in this study, all use volunteers for community outreach and education and 4 organizations use at least 25% of their volunteer time for outreach and education. This fits with volunteer survey results that found that 63.6% of respondents participated in education and outreach activities.

Not all participating organizations engage in direct conservation activities, therefore, only 6 out of 10 organizations use volunteers for conservation or restoration field work, with 4 using at least 25% of their volunteer time for these tasks. The decreased use of volunteers for direct conservation fits with 50% of surveyed volunteers reporting that they engaged in direct conservation activities.

Day to day administration activities, such as office support and fundraising are essential to maintaining all organizations, yet only 5 organizations use volunteers for regular administrative support and 6 for occasional administrative support and 2 for non-event fundraising. Of these 1 uses at least 25% of volunteer time for regular administrative support and 2 for occasional administrative support. Other functional roles within the organizations used minimal volunteer time. Forty percent of volunteers reported that they engaged in a functional role within their organization.

Future research could benefit from comparing the motives of volunteers who primarily engage in one of the three volunteer roles. Questions to consider are: Are certain volunteer types more attracted to specific volunteer roles? Is it more difficult to recruit volunteers for one type of role? How does volunteer retention compare among volunteers who engage in these different roles?

5.4 Volunteer Retention – Satisfaction and Barriers to volunteering

Once an individual begins volunteering, he or she immediately enters stage four of the VLC. When an individual begins to volunteer he or she will reflect on the volunteer experience and decide whether or not to continue being involved with the environmental organization. The individual will either return and continue through the VLC again or will stop volunteering. Past research has found that fulfillment of volunteer motives and overall satisfaction with the volunteer experience are related to volunteer retention (Clary et al., 1998; S. K. Green, 1984; Ryan et al., 2001). The results of one study, however, found that volunteer retention was far more complicated than simply satisfying volunteers (Davis, 2005). The most common reason given for volunteer loss was outside influences, such as other time commitments. Outside influences, such as other time commitments were the most common reasons for volunteer loss. Volunteer retention has also been found to be influenced by the addition of new motives for volunteering, such as an emotional attachment to the organization or the development of a sense of self tied to

one's identity as a volunteer (Finkelstein et al., 2005). This study included research questions on satisfaction as well as barriers.

Volunteer satisfaction is influenced by six factors.

This study identified six factors that influence volunteer satisfaction: Organization Satisfaction, Individual Freedom, Personal Contribution, Environmental Impact, Intrinsic Rewards, and Personal Benefits. Organizations should consider reviewing their volunteer programs on a regular basis. By distributing a survey consisting of the 27 satisfaction statements used in this study, organizations can quickly assess volunteer satisfaction and identify areas of their volunteer program which they should review more closely.

Interestingly, Budding Idealists and Career Environmentalists were found to be the most satisfied volunteer types. This goes against the theory that volunteers who have a larger number of volunteer motives will be harder to please. Perhaps if they have more motives for volunteering they will work harder to ensure that their motives are met. Future studies should aim to create a better match between motivation factors and satisfaction factors to facilitate comparison between the two.

Volunteer satisfaction accounts for some, but not all, discontinued volunteers.

Satisfaction

Overall, the majority of survey respondents were somewhat or very satisfied with their volunteer experience (88.2%) while 9.1% reported that they were somewhat or very unsatisfied. It is likely that the dissatisfied volunteer group is in fact smaller than 9.1% of respondents because at least 2 respondents (1.4%) had only provided high satisfaction ratings for all other questions and in their open ended responses, thus indicating that they may have mistakenly given a different answer than intended. Another indicator of overall volunteer satisfaction is the likelihood that respondents would recommend the organization to one of their friends. The majority of volunteers stated that they somewhat

or very likely would recommend the organization (91.7%) while only 4.2% were somewhat or very unlikely to recommend the organization to friends. In total 56.9% of active volunteers were committed to volunteering at the same level over the next year.

Dissatisfaction

Despite the high overall satisfaction rating and supportive willingness of volunteers to recommend the organization to others, 22% of active volunteers (26 respondents) did not anticipate that they would be volunteering in the next 12 months and another 11.2% would volunteer less time (13 respondents). Among inactive volunteers (permanent and temporary) only 44.4% were likely to return as a volunteer. This prediction of high volunteer turnover despite high overall satisfaction supports Davis's (2005) finding that overall satisfaction is not enough to predict volunteer retention. Also, past research has shown that the more reasons people have for engaging in volunteering, the harder it is to satisfy them and maintain their commitment long term (Kiviniemi et al., 2002).Thus, the ongoing changes in life provide a natural fallout of volunteers.

A higher rate of dissatisfaction compared to overall satisfaction, with specific aspects of the volunteer experience was reported by respondents. Out of 27 specific volunteer satisfaction statements factor analysis was able to derive six categories: Organization Satisfaction; Individual Freedom; Personal Contribution; Environmental Impact, Intrinsic Rewards; and Personal Benefits. While 9.1% of respondents had given a negative overall rating, 18.5% were dissatisfied with at least one aspect of their experience. The highest areas of dissatisfaction were with the Personal Benefits received while volunteering (10.3%), Environmental Impact (7.5%) and Organization Satisfaction (6.3%). The area of least dissatisfaction was with Intrinsic Rewards (2.7%). Dissatisfaction alone, however still does not explain all volunteer loss. Of the 25 respondents who no longer volunteer, only 28% were dissatisfied with any part of their experience.

Respondents were given the opportunity to elaborate why they had stopped, or anticipated stopping, their volunteer activities with their organization. They were also asked to recommend any changes that they believed would help improve their volunteer program and increase their volunteer contribution. These responses were valuable in describing the relationship between dissatisfaction and barriers to volunteering in reducing volunteer activity.

Barriers

Five barriers were identified as preventing volunteers from continuing their service or increasing their volunteer effort.

- Family/life commitments (including employment and school work)
- Other recreation activities/commitments
- Health barriers
- Physical barriers
- Moved

Overcoming these barriers in order to improve volunteer programs is not always feasible, which is the case with people who have moved away or who have prohibitive health barriers.

The two largest time commitments that compete with volunteering are family/life commitments and other recreation activities/commitments. While family and paid employment were both listed as major barriers to over 40% of respondents, one survey recommendation was to create family friendly volunteer activities. During these activities parents could work while the children played together, providing a social and community atmosphere and a low cost family activity. For some organizations with appropriate facilities and volunteer opportunities this may be an option.

Commitment to schoolwork was a major barrier for 26.8% of respondents. Several students commented that they were interested in utilizing their skills and gain work experience through volunteering but found limited benefits. For some it was difficult to

find meaningful opportunities while others quickly reached the highest level of training and did not feel there were enough personal benefits to continue. Organizations interested in utilizing students as volunteers may want to look into partnering with high schools and universities to see if students can combine volunteering and school work. This could include independent study projects or mentoring programs.

While it can be hard to compete with other recreation activities, and people should not be expected to spend all of their leisure time volunteering, it may be possible to combine other recreation activities with volunteering. Hosting social events for volunteers would give them a break from work and strengthen social relationships among volunteers. Also, approaching organized recreation groups, such as a soccer league, to partner with the environmental group for a one time event (fundraiser or community cleanup) is a way to incorporate existing community groups into environmental initiatives. This can be particularly beneficial if the community group has a connection to the environmental initiative. For example a group may be willing to help raise money to save their team mascot if it is endangered (ex: tigers), or to protect a park in the group's neighbourhood.

5.5 Recommendations to improve environmental organization volunteer programs

5.5.1 Volunteer activities

Application and use of the research results to improve volunteer programs differs depending on how organizations use their volunteers and the level of commitment specific activities require. For organizations that primarily use volunteers for low skill activities that require no training and minimal time commitment, research results will be of most use when recruiting volunteers. Organizations can use the volunteer profiles to identify volunteer types who are more likely to be interested in the benefits their activities offer. They can also use the identified volunteer motives to develop recruitment campaigns that specifically target individuals with compatible volunteer motives. Identified volunteer barriers may also be useful for assessing volunteer programs. Are

there barriers that the organization can address that would enable more people to volunteer for their organization?

Organizations that use volunteers for a wide range of activities that require specialized skills, training, or time commitment may find more value in the research results. Beyond volunteer recruitment, the volunteer satisfaction results are important. When organizations have high expectations of their volunteers, the volunteers likewise have high expectations of the organizations. Underutilization of volunteer skills, abilities and eagerness was reported by several survey respondents. Activities were not always found to be meaningful or properly equipped to enable volunteers to carryout their duties. Also, some volunteers felt that their time was wasted because staff did not prepare or delegate work for the volunteer during the scheduled volunteer shift. In some cases volunteers felt that the organization was not aware of their skills while other times the organization was not successful in communicating available opportunities to potential volunteers.

Interviews with environmental organizations found that they had difficulty trusting volunteers with large tasks, or tasks that require long term commitment. Lack of commitment or follow through from past volunteers has left some organizations afraid of giving volunteers too much responsibility. While this is a valid concern, the presented research results may be used by organizations to identify volunteers with motives that are more likely to meet expectations. Organizations could administer the volunteer motivation statements as part of an initial interview process. The results of the survey would identify what the volunteer is looking for and allow the organization to decide if the volunteer activity is a good fit for the individual. Also, the organization can clearly address the benefits of specific activities to ensure that potential volunteers are aware that some of their motives will or will not be met. During this interview it is important that the volunteer understands the commitment required by the volunteer activity. This is essential because even where interesting and challenging opportunities exist, for environmental volunteers may have their goals met and decide to move on before the volunteer activity is finished. For example, for individuals seeking work experience there is little incentive to stay once all training and sufficient work experience has been

completed. Establishing a minimal volunteer commitment when an individual is seeking a volunteer opportunity can help the organization to identify more committed volunteers.

Timing of volunteer activities and lack of interesting opportunities prevent volunteers from contributing more to organizations that they want to support. Some organizations are restricted to working within business hours which excludes participation from working volunteers. Also, flexibility in terms of time commitment and volunteer location (i.e. take work home) would allow some individuals to incorporate volunteering into a hectic and unpredictable schedule when convenient.

For individuals passionate about an organization's goals, it can be frustrating to be offered a volunteer position that does not seem critical or appear directly related to volunteer passions. Some individuals have visions of writing important reports and being at the front line of a major campaign without realizing that a lot of general office work, canvassing, and clipping news articles are the essential but less glamorous tasks that need to be done. Also, working alone can be discouraging. Several recommendations were made to increase social interaction among volunteers through volunteer events or more social volunteer opportunities. Finally, safety can be an issue that discourages volunteer participation. One volunteer commented that it was not safe to be working alone outside in a secluded area and recommended that volunteers be put in pairs.

5.5.2 Organization Volunteer Management

Management styles vary among environmental organizations depending on funding and size of the volunteer workforce. For smaller organizations with limited funding, volunteer coordinators are often on short contracts and may only work part time. In these situations turnover of volunteer management is high. A survey comment pointed out that short-term managers are often young with limited experience, which caused frustration for volunteers. Also, with turnover in management communication styles tend to be inconsistent and weaken contact between volunteers and the organization. Several commented that they would appreciate more regular communication, such as emails and

newsletters, to help keep volunteers informed of new opportunities and provide updates. A desire for more feedback and recognition of volunteer efforts was also expressed. There is a need for improved communication and feedback. While organizations do not have to bend to the whim of every volunteer, volunteers should at least feel that they are being respected and valued.

5.6 Recommendations for Volunteer Recruitment and Retention

The following recommendations should help organizations to improve volunteer recruitment, add satisfaction and assist in retaining long term volunteers.

- Conduct entrance interviews with each volunteer to identify:
    - Volunteer skills and experience
    - Motivation
    - Attractant (place/area, issue, activity, organization)
    - Volunteer availability, anticipated time commitment
    - Volunteer goals (training, letter of reference)
- Be upfront with volunteers about what the position offers. If the volunteers are demanding more than the organization can provide (training, special projects etc.) then try to recommend another group to them.
- Provide opportunity for volunteers to provide feedback with ideas to improve the program – Short volunteer survey, informal conversation, volunteer meetings etc.
- Give volunteers personal recognition and feedback as often as possible. Even taking the time to quickly thank a volunteer for coming in makes them feel appreciated.
- Try to conduct exit interviews, or contact volunteers who have stopped volunteering. While this can take up a lot of time, the feedback from these volunteers as to why they moved on can be valuable. It also lets them know that you noticed their absence.
- Evaluate volunteer programs yearly, or after each major "event" or campaign season. Take a few moments to jot down observations about what went well and what could have been improved. This will help to refresh memories when redesigning a program and update new coordinators.
- For positions that are difficult to fill, or have a high turnover rate, ask volunteers to suggest improvements. Would the activity be suitable for a small group that would bring in a social aspect? Could the activity be done on a more flexible schedule?
- Consider creating special projects for students. While the creation of special projects can take time, an organization can create an ongoing wish list of things it would like to have done but they do not have the time or skills to carry out. Posting these project

ideas on a volunteer recruitment website and at universities may attract students looking for special projects as part of their course work. Let professors know that you have small projects available that may be suitable for directed studies or honours students.

- Look for other special projects that could be of interests to community groups or companies with employee volunteer programs.

5.4 Strengths and limitations of the study

5.4.1 Strengths

The strengths of this study are based on the use of past research to design the research method and then going beyond past research to gain a better understanding of environmental volunteers. The VLC model (Bussell & Forbes, 2003) provided the framework that guided the creation and interpretation of the study. Within the VLC framework, this research focuses understanding of volunteer motivation; satisfaction; and retention specifically in the context of volunteers within environmental organizations. Past studies on environmental and conservation volunteers have been specific to individual organizations and have consisted mostly on qualitative methods or did not build on previous quantitative volunteer research such as the VMI (Clary et al., 1998) or the VSI (Galindo-Kuhn & Guzley, 2001). The range of research methods used by past studies does not provide for easy comparison of research results. The advantage of this study is that it built on past research which facilitated comparison between past and present research results.

Within the area of volunteer motivation, this study went beyond identifying motivation factors by ranking volunteer motives by frequency of response and by incorporating qualitative responses. Understanding the most common environmental volunteer motivations can help organizations to create recruitment campaigns as well as assess whether or not their volunteer program is able to fulfill the most common motivations. Qualitative responses from volunteers further contributed to understanding volunteer motivation by revealing that motivation is multidimensional.

By clustering quantitative volunteer motivation factors, this study presented new evidence that volunteers can be meaningfully grouped into a volunteer type based on volunteer motivation. Understanding how motives fit together can help organizations create volunteer opportunities that appeal to specific types of volunteers. By matching volunteers to ideal opportunities organizations can begin to address volunteer retention from the recruitment stage rather than discovering that a volunteer is dissatisfied after they have been trained and placed in a position.

Through identifying factors that affect environmental volunteer satisfaction, this study has built on the VSI (Galindo-Kuhn & Guzley, 2001) and created a tool that environmental organizations can use to begin evaluating volunteer programs. The list of satisfaction statements used in this study can easily be developed into a questionnaire for use my environmental organizations. It can also be used in future studies that may look at volunteer satisfaction within specific environmental organizations or among specific types of volunteers.

The interviews conducted with environmental organizations provide insight into environmental volunteers from the organization perspective. While focusing on retaining volunteers and keeping volunteers satisfied it can be easy to forget that environmental organizations also have needs that must be met. The results of the organization interviews contribute to understanding the organization perspective of using volunteers and presents challenges faced by organizations. Highlighting organization challenges helps to understand volunteer satisfaction because organization limitations are exposed. One can also question the importance of retaining volunteers that are unsatisfied if increasing volunteer satisfaction requires excessive effort and expense with out sufficient benefit to organizations.

5.4.2 Limits

Only organizations with at least one paid staff member were included in the study. Environmental groups that were run strictly by volunteers could have different volunteer expectation than within an organization with a "paid" and "volunteer" breakdown. The initial goal of the study was to include an equal number of past and present volunteers in order to compare them and draw conclusions. Due to the challenge of contacting inactive volunteers only 25 surveys were returned by inactive volunteers, and 24 from temporarily inactive volunteers compared with 96 active volunteers. Few differences were found between the groups therefore for the purpose of understanding stages in the VLC the variation in responses proved more important than the comparison between past and present volunteers.

Obtaining survey results from volunteers within each organization was also a challenge. A combination of in person distribution; email/internet survey; drop off survey where organizations could pass them out; and snowballing where volunteers recommended and directed other volunteers to the online website were all used to increase volunteer numbers and attempt to recruit feedback from a wide variety of volunteers. The promise of being able to distribute surveys with one volunteer appreciation event did not come to fruition as the volunteer coordinator's contract ran out and the event was not held. Attendance at several public events where "there will be volunteers" found that events were either in constant motion where it was difficult to engage participants in conversation or almost no one showed up. These events resulted in completed surveys but very few for the amount of time invested.

The internet survey was added near the end of the initial anticipated data collection period and extended data collection by one month. Previous conversations with other researchers and internet savvy people had indicated that an internet based survey would cost hundreds or thousands of dollars. An attempt was made to create an interactive PDF for people to complete and send back, but without the full professional version of Adobe responders would only be able to print and mail their responses and could not save the

form. Fortunately someone who had used an online survey program explained how easy and inexpensive it actually was. Approval for the alternate version of the survey was obtained and the internet survey was as successful in recruiting volunteers in a shorter amount of time than the paper surveys. In addition, one organization that was previously unwilling to participate due to the irregular and independent work of their volunteers changed their mind after the internet survey was introduced. It is possible that a unique and select type of volunteer was left out. Had the internet survey been available from the beginning some more seasonal volunteers may have been included.

5.5 Recommendations for future research

Several recommendations have been made while discussing the research results. A few more recommendations should be considered in relation to this study overall.

- The research conducted for this thesis was conducted in a limited time frame. Extending data collection over a year would have three major benefits. First, a longitudinal study of the volunteer experience could be conducted to follow a group of new volunteers over the whole year. Turnover rates among these volunteers could be more clearly documented. Secondly, new volunteers could wait to complete the survey until they had spent a few months with the organization. This would enable them to provide more detailed feedback. Third, all volunteers for seasonal events would be easier to reach.
- A similar study of entirely volunteer run organizations warrants investigation. Are these volunteers more committed because the organization would certainly not exist without them? Is there more pressure within these groups to give more time and possibly burn out volunteers? Volunteer burnout was not found to be an issue in this study but has been addressed in other volunteer retention literature.
- A comparison study of volunteer satisfaction could be conducted with other organizations, such as health related organizations or social services organizations, to see if volunteer satisfaction is affected by the same, or similar factors as environmental organizations.

- From an organization perspective, a more in depth review of the role of volunteers within organizations is needed. What are the barriers that keep organizations from using volunteers for a wider variety of tasks? Are some roles within an organization better suited to paid staff rather than volunteers? Comparisons between entirely volunteer run organizations and those with paid staff would be essential.
- From a volunteer's perspective, further comparison should be made between volunteer roles and volunteer motives, satisfaction and retention. Questions to consider: Are certain volunteer types more attracted to specific volunteer roles? Is it more difficult to recruit volunteers for one type of role? How does volunteer retention compare among volunteers who engage in these different roles?

5.6 Conclusion

Volunteers have always been an essential part of the environmental movement and nonprofit environmental organizations. The four stages of the VLC were used to guide this study in order to help organizations increase volunteer retention and, as a result, strengthen their organizations. Nine motives were found to motivate people to volunteer namely: Environmental Values, Intrinsic Satisfaction, Efficacy, Protective, Social Interests, Personal Growth, Career, Independence and Social Norms. The ability of organizations to live up to and satisfy volunteer motives contributes to volunteer satisfaction and retention. Other factors, such as organization management style, the variety of meaningful volunteer opportunities, flexibility of the volunteer schedule, and personal benefits such as training and experience were found to affect volunteer satisfaction and retention. Finally, several barriers to volunteering were identified, including difficulty or high cost to access the volunteer site, poor health, safety concerns, and commitments to family, school, and career all reduced or prevented volunteer activity.

By assessing the benefits individual volunteer roles can provide, organizations can specifically recruit volunteers that will be most satisfied by what the role offers. If an organization has difficulty recruiting volunteers for specific tasks they may be able to modify the task in order to attract and sustain a different group of people. For example,

pairing individuals for tasks that may otherwise be done alone to add a social element that attracts new volunteers.

Ultimately, it is impossible to satisfy everyone all the time. By gaining an understanding of a volunteer's motives and interests from the beginning organizations can attempt to clearly outline the benefits and limits of the opportunities they have to offer. If insufficient benefit can be found for the volunteer then another organization can be recommended that may be better suited. This can help organizations because they lose less time training or attempting to satisfy a volunteer who will not stay long. As well, volunteers will have a better overall experience, which will reduce frustration and potentially sour the relationship between the organization and volunteer.

5.7 Knowledge Mobilization

Conference presentations

-The Sixth International Science and the Management of Protected Areas (SAMPAA), 2007

-Canadian Association of Geographers (CAG), 2007

-Canadian Congress on Leisure Research (CCLR 12), 2008

-24th International Congress for Conservation Biology, July 3-7, 2010 (Presented by Dr. Rollins)

Report Summary and Presentation

Participating organizations will be invited to a presentation of the research findings. Organizations will receive a summary report of the research findings and will have the opportunity to provide feedback and discuss how the research relates to their volunteer programs.

Publications

Two journal articles will be written. One will focus on volunteer motivation and the six volunteer types. The second will present the results of the volunteer satisfaction, barriers to volunteering, and organization management results.

Potential journals:

-Nonprofit Management and Leadership

-Nonprofit and Voluntary Sector Quarterly

-Environment and Behavior

-Environments

-Journal of Environmental Planning and Management

-Voluntas: International Journal of Voluntary and Nonprofit Organizations

Bibliography

Alberts, A. C., & Grant, T. D. (2003). Involving the public in endangered species recovery through volunteer field research: A test case with Cuban iguanas. *Applied Environmental Education and Communication, 2*(3), 147.

Alexander, D., Tomalty, R., & Amielski, M. (2004). *BC sprawl report: Economic vitality and liveable communities*. Vancouver: Smart Growth BC.

Allison, L. D., Okun, M. A., & Dutridge, K. S. (2002). Assessing volunteer motives: A comparison of an open-ended probe and Likert rating scales. *Journal Of Community & Applied Social Psychology, 12*(4), 243.

Austin, M. A., & Eriksson, A. (2009). *The biodiversity atlas of British Columbia*. Victoria, BC: Biodiversity BC.

Barla, P., Power, J. G., Saphores, J.-D., Attridge, I., & Hilts, S. (2003). Protecting biodiversity in Canada: The role of non-profit organizations. In K. Brock & K. Banting (Eds.), *The nonprofit sector in interesting times, case studies in a changing sector*. Montreal: McGill-Queen's University Press.

Barr, H. (1971). *Volunteers in prison after-care*. London: George Allen & Unwin LTD.

Bell, K. (2003). *Assessing the benefits for conservation of volunteer involvement in conservation activities*. Wellington, New Zealand.: New Zealand Department of Conservation.

Bell, S., Marzano, M., Cent, J., Kobierska, H., Podjed, D., Vandzinskaite, D., et al. (2008). What counts? Volunteers and their organizations in the recording and monitoring of biodiversity. *Biodiversity Conservation, 17*(14), 3443.

Bowman, W. (2004). Confidence in charitable institutions and volunteering. *Nonprofit and Voluntary Sector Quarterly, 33*(2), 247.

Bramante, A. C. (2004). *Fostering human resources in the leisure field:'serious leisure'and the potential role of volunteers. A proposal for developing countries*. Wallingford, UK: CABI Publishing.

Brudney, J. L. (1999). Effective use of volunteers: Best practices for the public sector, the. *Law and Contemporary Problems, 62*(4), 219.

Bussell, H., & Forbes, D. (2003). The volunteer life cycle: A marketing model for volunteering. *Voluntary Action, 5*(3), 61.

Butcher, J. (2003). A humanistic perspective on the volunteer-recipient relationship. In P. Dekker & L. Halman (Eds.), *The values of volunteering: Cross-cultural perspectives* (pp. 111). New York: Kluwer Academic/Plenum Publishers.

Canadian Environmental Grantmakers' Network. (2004). A profile of environmental nonprofit and voluntary organizations in Canada. *CEGN Research Brief* Retrieved December 30 2008, from http://www.cegn.org/NSNVO%20Environment%20Highlights.pdf

Canadian Volunteerism Initiative. (2001). *The report of the national volunteerism initiative joint table*. Ottawa, ON: Government of Canada.

Cardinal, R. N., & Aitken, M. R. F. (2006). *ANOVA for the behavioural sciences researcher*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Chinman, M. J., & Wandersman, A. (1999). The benefits and costs of volunteering in community organizations: Review and practical implications. *Nonprofit and Voluntary Sector Quarterly, 28*(1), 46.

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., et al. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*(6), 1516.

Clary, E. G., Snyder, M., & Stukas, A. A. (1996). Volunteers'motivations: Findings from a national survey. *Nonprofit and Voluntary Sector Quarterly, 25*(4), 485.

Cnaan, R. A., & Goldberg-Glen, R. S. (1991). Measuring motivation to volunteer in human services. *The Journal of Applied Behavioral Science, 27*(3), 269.

Cnaan, R. A., Handy, F., & Wadsworth, M. (1996). Defining who is a volunteer: Conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly, 25*(3), 364.

Cope, M. (2005). Coding qualitative data. In I. Hay (Ed.), *Qualitative research methods in human geography* (2nd Ed. ed., pp. 223). Oxford: Oxford University Press.

CTV Staff. (2007). Environment tops public agenda, poll finds. Retrieved August 20, 2008, from http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20070125/environment_poll_07025?s_name=&no_ads=

Cuthill, M. (2000). An interpretive approach to developing volunteer-based coastal monitoring programmes. *Local Environment, 5*(2), 127.

Davis, M. H. (2005). Becoming (and remaining) a community volunteer: Does personality matter? In A. M. Omoto (Ed.), *Processes of community change and social action* (pp. 67). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227.

Dekker, P., & Halman, L. (2003). *The values of volunteering: Cross-cultural perspectives*. New York: Kluwer Academic.

Donald, B. J. (1997). Fostering volunteerism in an environmental stewardship group: A report on the Task Force to Bring Back the Don, Toronto, Canada. *Journal of Environmental Planning and Management, 40*(4), 483.

Dunlap, R. E., & Mertig, A. G. (1992). *American environmentalism: The US environmental movement, 1970-1990*. New York: Taylor & Francis.

Farmer, S. M., & Fedor, D. B. (1999). Volunteer participation and withdrawal. *Nonprofit Management and Leadership, 9*(4), 349.

Finkelstein, M. A., Penner, L. A., & Brannick, M. T. (2005). Motive, role identity, and prosocial personality as predictors of volunteer activity. *Social Behavior And Personality, 33*(4), 403.

Fowler, F. J. (1993). *Survey research methods* (3rd ed. Vol. 1). London: SAGE Publications.

Freeman, R. B. (1997). Working for nothing: The supply of volunteer labor. *Journal of Labor Economics, 15*(1), 140.

Galindo-Kuhn, R., & Guzley, R. M. (2001). The volunteer satisfaction index: Construct definition, measurement, development, and validation. *Journal Of Social Service Research, 28*(1), 45.

Gold, J. (1980). *An introduction to behavioural geography*. New York: Oxford University Press.

Green-Demers, I., Pelletier, L. G., & Ménard, S. (1997). The impact of behavioural difficulty on the saliency of the association between self-determined motivation and environmental behaviours. *Canadian journal of behavioural science, 29*(3), 157.

Green, B. C., & Chalip, L. (2004). Paths to volunteer commitment: Lessons from the Sydney Olympic games. In R. A. Stebbins & M. Graham (Eds.), *Volunteering as leisure/leisure as volunteering: An international assessment* (pp. 49). Wallingford, UK: CABI Publishing.

Green, S. K. (1984). Volunteer motivation and its relationship to satisfaction and future volunteering.

Guggenheim, D. (Writer) (2006). *An inconvenient truth* [motion picture]. In A. Gore (Producer). United States: Paramount Pictures.

Hager, M., & Brudney, J. (2004). *Volunteer management practices and retention of volunteers.* Washington, DC: The Urban Institute.

Hager, M., & Brudney, J. (2005). Net benefits: Weighing the challenges and benefits of volunteers. *The Journal of Volunteer Administration, 23*(1), 26.

Hall, M., Lasby, D., Ayer, S., & Gibbons, W. D. (2009). *Caring Canadians, involved Canadians: Highlights from the 2007 Canadian survey of giving, volunteering and participating*. Ottawa: Statistics Canada.

Hall, M., McKeown, L., & Roberts, K. (2001). *Caring Canadians, involved Canadians: Highlights from the national survey of giving, volunteering and participating*. Ottawa, Ontario: Statistics Canada.

Halpenny, E. A., & Caissie, L. T. (2003). Volunteering on nature conservation projects: Volunteer experience, attitudes and values. *Tourism Recreation Research, 28*(3), 25.

Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1986). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *Journal of Environmental Education, 18*(2), 1.

Houle, B. J., Sagarin, B. J., & Kaplan, M. F. (2005). A functional approach to volunteerism: Do volunteer motives predict task preference? *Basic and Applied Social Psychology, 27*(4), 337.

Johnston, R. J. (1991). *Geography and geographers: Anglo-American human geography since 1945*. London: Hodder Arnold.

Kaplan, S. (2000). Human nature and environmentally responsible behavior. *Journal of Social Issues, 56*(3), 491.

Kidd, A. H., Kidd, R. M., & Zasloff, R. L. (1996). Characteristics and motives of volunteers in wildlife rehabilitation. *Psychological Reports, 79*(1), 227.

Kiviniemi, M. T., Snyder, M., & Omoto, A. M. (2002). Too many of a good thing? The effects of multiple motivations on stress, cost, fulfillment, and satisfaction. *Personality and Social Psychology Bulletin, 28*(6), 732.

Kraus, R., & Allen, L. R. (1998). *Research and evaluation in recreation, parks and leisure studies* (2nd ed.). Boston: Allyn and Bacon.

Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2003). An examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian trail. *Journal of Leisure Research, 35*(3), 249.

Liao-Troth, M. A. (2001). Attitude differences between paid workers and volunteers. *Nonprofit Management and Leadership, 11*(4), 423.

Light, A. (2002). Restoring ecological citizenship. In B. Minteer & B. P. Taylor (Eds.), *Democracy and the claims of nature* (pp. 153). Lanham, MD: Rowman & Littlefield.

Macduff, N. (2005). Societal changes and the rise of the episodic volunteer. In J. L. Brudney (Ed.), *Emerging areas of volunteering*. Indianapolis: ARNOVA.

Manzo, L. C., & Weinstein, N. D. (1987). Behavioral commitment to environmental-protection - a study of active and nonactive members of the Sierra Club. *Environment and Behavior, 19*(6), 673.

Martinez, T. A., & McMullin, S. L. (2004). Factors affecting decisions to volunteer in nongovernmental organizations. *Environment and Behavior, 36*(1), 112.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper.

Mauch, C., Stoltzfus, N., & Weiner, D. (2006). *Shades of green: Environmental activism around the globe*. Toronto: Rowman & Littlefield Publishers.

McKenzie-Mohr, D. (2000). New ways to promote proenvironmental behavior: Promoting sustainable behavior: An introduction to community-based social marketing. *Promoting Environmentalism, 56*(3), 543.

Miles, I., Sullivan, W., & Kuo, F. (1998). Ecological restoration volunteers: The benefits of participation. *Urban Ecosystems, 2*(1), 27.

Millennium Ecosystem Assessment. (2005). *Ecosystems and human well-being: Synthesis*. Washington, DC: Island Press.

Mitchell, R. C., Mertig, A. G., & Dunlap, R. E. (1992). Twenty years of environmental mobilization: Trends among national environmental organizations. In R. E. Dunlap & A. G. Mertig (Eds.), *American environmentalism: The U.S. Environmental movement, 1970-1990*. Washington, DC: Taylor & Francis.

Mitra, A., & Lankford, S. (1999). *Research methods in park, recreation, and leisure services*. Champaign, IL.: Sagamore Publishing.

Monroe, M. C. (2003). Two avenues for encouraging conservation behaviors. *Human Ecology Review, 10*(2), 113.

Moore, L. F. (1985). Motivation in the context of volunteerism. In L. F. Moore (Ed.), *Motivating volunteers* (pp. 1). Vancouver: The Vancouver Volunteer Centre.

Needham, M. D., & Rollins, R. B. (2005). Interest group standards for recreation and tourism impacts at ski areas in the summer. *Tourism Management, 26*(1), 1.

Newman, C., Buesching, C. D., & Macdonald, D. W. (2003). Validating mammal monitoring methods and assessing the performance of volunteers in wildlife conservation - "sed quis custodiet ipsos custodies?" *Biological Conservation, 113*(2), 189.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: MGraw-Hill.

Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation - motivation, longevity of service, and perceived attitude-change among AIDS volunteers. *Journal of Personality and Social Psychology, 68*(4), 671.

Pattengill-Semmens, C. V., & Semmens, B. X. (2003). Conservation and management applications of the reef volunteer fish monitoring program. *Environmental Monitoring and Assessment, 81*(1 - 3), 43.

Pearce, J. L. (1983). Job attitude and motivation differences between volunteers and employees from comparable organizations. *Journal of Applied Psychology, 68*(4), 646.

Pelletier, L. G., Tuson, K. M., Green-Demers, I., Noels, K., & Beaton, A. M. (1998). Why are you doing things for the environment? The motivation toward the environment scale (mtes) 1. *Journal of Applied Social Psychology, 28*(5), 437.

Ralston, R., & Rhoden, S. (2005). The motivations and expectations of volunteers on cycle trails: The case of the national cycle network, UK. *Tourism and Hospitality Planning & Development, 2*(2), 101.

Ryan, R., Kaplan, R., & Grese, R. E. (2001). Predicting volunteer commitment in environmental stewardship programmes. *Journal of Environmental Planning and Management, 44*(5), 629.

Salamon, L. M. (2002). *The state of nonprofit America*. Washington, D.C: Brookings Institution Press.

Salant, P., & Dillman, D. (1994). *How to conduct your own survey*. New York: John Wiley & Sons Inc.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8*(4), 350.

Schram, V. R. (1985). Motivating volunteers to participate. In L. F. Moore (Ed.), *Motivating volunteers.* (pp. 13). Vancouver: Vancouver Volunteer Centre.

Snow, D. (1992). *Inside the environmental movement*. Washington D.C.: Island Press.

Stebbins, R. A., & Graham, M. (2004). *Volunteering as leisure/leisure as volunteering: An international assessment*. Cambridge, MA: CABI Publishing.

Stern, P. C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior. *Promoting Environmentalism, 56*(3), 407.

Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment, 80*(1), 99.

Tourism British Columbia Research Service. (2007). *Regional profile. Building tourism with insight: Vancouver Island, Victoria and the Gulf Islands*. Victoria, BC: Tourism British Columbia.

Whitaker, D. M. (2003). The use of full-time volunteers and interns by natural-resource professionals. *Conservation Biology, 17*(1), 330.

Williams, D. R., & Patterson, M. E. (1996). Environmental meaning and ecosystem management: Perspectives from environmental psychology and human geography. *Society and Natural Resources, 9*(5), 507.

Wright, N. (2002). *Eelgrass conservation for the B.C. Coast: A discussion paper*. Victoria, BC: B.C. Coastal Eelgrass Stewardship Project.

Yeung, A. (2004). The octagon model of volunteer motivation: Results of a phenomenological analysis. *Voluntas: International Journal of Voluntary and Nonprofit Organizations, 15*(1), 21.

Appendix A Volunteer letter of consent

A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT

Dear Conservation Volunteer

You are being invited to participate in a study entitled A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT that is being conducted by ANGELA HUNTER who is a Graduate Student in the Geography Department at the University of Victoria and you may contact her if you have further questions by calling (250) 721-7345.

As a Graduate student, this research is part of the requirements for a Master of Arts degree and it is being conducted under the supervision of Dr. Rick Rollins. You may contact the supervisor at (250) 816-9124.

The purpose of this study is to gain an understanding of conservation volunteers, specifically what motivates them to begin volunteering and what contributes to their satisfaction and decision to remain as a volunteer. This is achieved by examining volunteer management strategies implemented by conservation organizations and through the measurement of volunteer motivations and satisfaction with different aspects of their volunteer experience. This research is important because it examines strategies that maximize the effectiveness of volunteer programs while maximizing volunteer satisfaction and benefits. The results of this study will contribute to the development of improved volunteer management strategies within conservation organizations.

You are being invited to participate in this study because the opinions and perceptions of conservation volunteers within the Capital Regional District are very important in our study. As one of many volunteers within the Capital Regional District, you have been randomly selected to participate in this study. If you agree to voluntarily participate in this research, you participation will include the completion of the questionnaire, entitled A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT, which will take approximately 15 minutes to complete. Completion of this survey will occur during your volunteer shift, or during your free time if you prefer to mail back the questionnaire with the return envelope provided. In order for this questionnaire to be completely confidential, please do not put your name or identifying information on the questionnaire. WHILE THE QUESTIONNAIRE WILL BE CONNECTED TO THE CONSERVATION ORGANIZATION YOU VOLUNTEER WITH, THE ORGANIZATION WILL NOT BE NAMED IN THE RESEARCH RESULTS.

There are no known or anticipated risks to you by participating in this research, however the questionnaire is expected to take approximately 15 minutes of your time to complete. The researcher has fully disclosed her role in the natural observation component of this study.

The potential benefits of your participation in this research include contributions to volunteer management techniques as appropriate to management strategies within nonprofit conservation organization settings. Further, benefits to conservation and to subsequent

conservation volunteers will accrue with additional knowledge of effective strategies to maximize the use of volunteers in conservation efforts and maximize volunteer satisfaction.

CONSENT TO PARTICIPATE:

I understand that my participation is entirely voluntary and my choice to participate will have no bearing on me whatsoever. I can withdraw from this study at any time without any consequences or any explanation. However, if I do withdraw from the study after I have completed and returned the questionnaire in whole or in part, I realize that the data that I have provided may still be used in the final analysis because removal of the data is logistically impossible since my name will not be connected with this questionnaire in any way at any time during the study. By submitting this survey, it will be understood that I have consented to participate.

I understand that my participation in this study is completely voluntary, there are no anticipated risks as a result of participating, and that all of the collected data will remain confidential as all completed surveys will be kept in a locked cabinet in a locked room which will only be accessible to the researcher and her direct supervisor (named above). I understand that all of the individual questionnaires will be destroyed (shredded) upon completion of the research, and only summarized, tabulated and statistical information from the questionnaires will be reported in any results made available to any persons other than the interviewer. I also understand that my responses will be connected to the organization I volunteer(ed) for and that the organization WILL NOT BE NAMED in the study results.

I understand that it is anticipated that the results of this study will be shared with others mainly through one primary outlet: a Master's Thesis to be held at the University of Victoria and the National Library of Canada. I am also aware that a copy of this work may be provided to the participating conservation organizations. I also understand that dissemination of research results may also occur through academic journal publications, conference presentations and proceedings, and presentations to nonprofit organizations.

In addition to being able to contact the researcher and her direct supervisor at the above telephone numbers, I may verify the ethical approval of this study, or raise any concerns I may have, by contacting the Associate Vice President of Research at the University of Victoria at (250) 472-4545.

I understand that this is an anonymous survey and my identity and personal information will not be connected in any way to my responses in the questionnaire. By returning this questionnaire I indicate that I have read and fully understand the above conditions of participation in this study and that I have had the chance to have any questions I may have regarding this study answered by either the researcher and/or her direct supervisor.

THANK YOU IN ADVANCE FOR YOUR PARTICIPATION

Appendix B Volunteer survey

A STUDY OF CONSERVATION VOLUNTEERS WITHIN THE CAPITAL REGIONAL DISTRICT

SURVEY OF CONSERVATION VOLUNTEERS

University of Victoria
Department of Geography
PO Box 3050
Victoria, BC Canada V8W 3P5

VOLUNTEER PROFILE

In order to provide rewarding volunteer experiences it is important to know more about your volunteer interests.

Q1. Are you presently a volunteer with _____?

1 YES, I AM AN ACTIVE VOLUNTEER

2 YES, BUT I AM TEMPORARILY INACTIVE

3 NO, I NO LONGER VOLUNTEER WITH THIS ORGANIZATION

Q2. How long have you, or did you, volunteer with this organization?

1 LESS THAN ONE YEAR

2 BETWEEN ONE AND TWO YEARS

3 BETWEEN TWO AND THREE YEARS

4 BETWEEN THREE AND FOUR YEARS

5 MORE THAN FOUR YEARS

Q3. Which of the following statements best describes your time commitment and availability while volunteering with this organization? (Please select all that apply)

1 I volunteered on a set schedule over a long period of time. (For example: Three hours every Monday.)

2 I volunteered occasionally as needed. (For example: on community clean up days, or for a special event)

3 I volunteered on a short term basis for a specific project. (For example, planning and organizing a one time event over a period of six months or less.)

4 I volunteered regularly at specific annual events. (For example, an annual plant sale.)

Q4. Compared to others I know, I would consider myself to have been _____.
(Please select one)

MINIMALLY ACTIVE		ACTIVE		VERY ACTIVE
1	2	3	4	5

Q5. Please indicate what the type(s) of volunteer role(s) you have had within the organization. (Select all that apply)

1 Regular administrative support (On a set schedule over a long period of time for secretarial, media relations etc.)

2 Occasional administrative support (short term help, such as preparing mail-outs).

3 Community outreach and education programs.

4 Event organization and planning (leadership role).

5 Short term event assistant (eg. Assist with fundraisers, community events).

6 Conservation or restoration field work.

7 Research and/or monitoring.

8 Non-event fundraising (eg. Canvassing, membership drives).

9 OTHER (PLEASE DESCRIBE): _____

Q6. WHICH STATEMENT BEST DESCRIBES YOUR MEMBERSHIP WITH THE ORGANIZATION?

1 The organization does not have members.

2 I am not a member of the organization.

3 I was a member of the organization before becoming a volunteer.

4 I volunteered for the organization before becoming a member.

5 I became a member of the organization when I began volunteering.

VOLUNTEER MOTIVATION

Q7. Take a moment to reflect on **why** you began volunteering. Please indicate **how important** or **accurate** each of following the possible **reasons for volunteering** was to your decision to volunteer with this organization.

I volunteered because…	NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	SOMEWHAT IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
A. I felt it was important to help others.	1	2	3	4	5
B. People I am close to wanted me to volunteer.	1	2	3	4	5
C. I found volunteer activities enjoyable	1	2	3	4	5
D. I wanted to help the organization.	1	2	3	4	5
E. I knew others who volunteer with this organization.	1	2	3	4	5
F. I was genuinely concerned about the environment.	1	2	3	4	5
G. I thought volunteering would relieve me of some guilt over my environmental impacts.	1	2	3	4	5
H. I wanted to give back to nature.	1	2	3	4	5
I. I enjoyed the social aspects of volunteering.	1	2	3	4	5
J. I expected that volunteering would help me feel more hopeful about the future of the environment.	1	2	3	4	5
K. Volunteering gave me peace of mind.	1	2	3	4	5
L. My friends volunteered.	1	2	3	4	5
M. Volunteering was an important activity to people I know best.	1	2	3	4	5
N. I felt a sense of responsibility towards the environment.	1	2	3	4	5
O. I thought I could do something for a cause that was important to me.	1	2	3	4	5
P. Volunteering was a way to make new friends.	1	2	3	4	5
Q. I was concerned about the environment for future generations.	1	2	3	4	5
R. I could meet new people	1	2	3	4	5
S. Volunteering could help me to get my foot in the door at a place where I wanted to work.	1	2	3	4	5
T. Volunteering let me learn things through direct, hands on experience.	1	2	3	4	5
U. I felt the organization needed me.	1	2	3	4	5

I volunteered because…	NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	SOMEWHAT IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
V. Volunteering gave me a chance to reflect.	1	2	3	4	5
W. I thought volunteer experience would look good on my résumé.	1	2	3	4	5
X. I expected volunteering to allow me to work at my own pace.	1	2	3	4	5
Y. I thought I would be able to grow as an individual.	1	2	3	4	5
Z. I expected to have freedom to decide how to carry out my volunteer assignment.	1	2	3	4	5
AA. I believed that volunteering would allow me to gain a new perspective on things.	1	2	3	4	5
BB. Volunteering allowed me to explore different career options.	1	2	3	4	5
CC. I wanted to explore my own strengths.	1	2	3	4	5
DD. I thought I would learn more about the cause for which I was volunteering.	1	2	3	4	5
EE. I found my volunteer work to be rewarding	1	2	3	4	5
FF. I wanted to make new contacts that might help my business or career.	1	2	3	4	5
GG. I had knowledge and skills that could be useful to the organization.	1	2	3	4	5
HH. I thought volunteering could help me to succeed in my chosen profession.	1	2	3	4	5
II. I felt like my volunteer work would make a difference	1	2	3	4	5

Q8. In your own words, please describe the **most important reason(s)** why you volunteered with this organization.

VOLUNTEER SATISFACTION

Q9. Please indicate your level of **satisfaction** with the ability of your volunteer work to fulfil the following statements.

	VERY DISSATISFIED	SOMEWHAT DISSATISFIED	NEUTRAL	SOMEWHAT SATISFIED	VERY SATISFIED
A. My volunteer work has helped the organization.	1	2	3	4	5
B. My volunteer work has had a positive impact on the environment.	1	2	3	4	5
C. I feel better about my environmental impacts.	1	2	3	4	5
D. Volunteering has helped me to feel more hopeful for the future.	1	2	3	4	5
E. People I am close to are happy that I volunteered.	1	2	3	4	5
F. The social aspects of volunteering are what I wanted.	1	2	3	4	5
G. My volunteer activities have been enjoyable.	1	2	3	4	5
H. This volunteer experience meets my career goals.	1	2	3	4	5
I. I experienced personal growth as a volunteer.	1	2	3	4	5
J. I have had the opportunity to learn new things.	1	2	3	4	5
K. My volunteer work has been rewarding.	1	2	3	4	5
L. I felt like my volunteer work made a difference.	1	2	3	4	5

Q10. Please indicate your level of satisfaction with the following organizational aspects of your volunteer experience.

	VERY DISSATISFIED	SOMEWHAT DISSATISFIED	NEUTRAL	SOMEWHAT SATISFIED	VERY SATISFIED
A. The level of project organization.	1	2	3	4	5
B. How much the organization needed me.	1	2	3	4	5
C. The degree to which the organization communicated its expectations of me.	1	2	3	4	5
D. The quality of my volunteer leader.	1	2	3	4	5
E. The way the organization showed their appreciation for my work.	1	2	3	4	5
F. The availability of getting help when I needed it.	1	2	3	4	5
G. My relationship with paid staff.	1	2	3	4	5
H. The support network that was in place when I had volunteer-related problems.	1	2	3	4	5
I. The way in which the agency provided me with performance feedback.	1	2	3	4	5

	VERY DISSATISFIED	SOMEWHAT DISSATISFIED	NEUTRAL	SOMEWHAT SATISFIED	VERY SATISFIED
J. The clarity of communication between paid staff and volunteers.	1	2	3	4	5
K. How often the organization acknowledged the work I did.	1	2	3	4	5
L. The chance I had to utilize my knowledge and skills in my volunteer work.	1	2	3	4	5
M. The freedom I had to work at my own pace.	1	2	3	4	5
N. The freedom I had in deciding how to carry out my volunteer assignment.	1	2	3	4	5
O. The availability of resources and materials I needed to complete my volunteer tasks.	1	2	3	4	5

Q11. Overall, how satisfied are you with your volunteer experience:

1 VERY DISATISFIED
2 SOMEWHAT DISATISFIED
3 NEUTRAL
4 SOMEWHAT SATISFIED
5 VERY SATISFIED

Q12. Would you recommend volunteering with this organization to a friend?

1 VERY UNLIKELY
2 SOMEWHAT UNLIKELY
3 NOT SURE
4 SOMEWHAT LIKELY
5 VERY LIKELY

Q13. Do you have any further comments about aspects of your volunteer experience with which you are satisfied or dissatisfied?

BARRIERS TO VOLUNTEERING

Q14. To what extent do the following factors discourage or prevent you from becoming more active as a volunteer for this organization?

	Not a consideration	Minor consideration	Major consideration
A. Time commitments to paid employment.	1	2	3
B. Time commitments to family or personal matters.	1	2	3
C. Time commitments to other volunteer activities.	1	2	3
D. Time commitments to school work.	1	2	3
E. Other time commitments (please specify)_____.	1	2	3
F. Lack of volunteer coordination (eg. Information regarding volunteer opportunities.)	1	2	3
G. Lack of encouragement or support from other volunteers	1	2	3
H. Lack of encouragement or support from the organization	1	2	3
I. Feelings of frustration from perceived unimportance of volunteer tasks.	1	2	3
J. Distance to volunteer location.	1	2	3
K. The demand volunteering places on my financial resources.	1	2	3
L. Other (please specify) _____.	1	2	3

Q15. Consider the barriers that keep you from volunteering. Is there anything the **organization can do or change** that would encourage or enable you to volunteer more time over the next 12 months?

Q16. If you are **not currently volunteering**: how likely is it that **you will return** to volunteer with the organization within the **next 12 months**?

1 VERY UNLIKELY
2 SOMEWHAT UNLIKELY
3 NOT SURE
4 SOMEWHAT LIKELY
5 VERY LIKELY

Q17. If you are an **active volunteer:** compared to the last 12 months, how much time do you anticipate volunteering with this organization **in the next 12 months?**

1 I WILL VOLUNTEER LESS
2 I WILL VOLUNTEER ABOUT THE SAME AMOUNT
3 I WILL VOLUNTEER MORE
4 NOT SURE

Q18. If you will volunteer less or likely not at all over the next 12 months, please describe the main factors that will keep you from volunteering.

ABOUT YOU

Finally, we would like to ask you a few questions about your background.

Q19. Do you presently volunteer with any other organizations? (Circle all that apply)

1 Yes, other environmental organizations
2 Yes, other non-environmental organizations
3 No, I do not volunteer anywhere else

Q20. Gender

1 MALE
2 FEMALE

Q21. What is your employment status?

1 UNEMPLOYED
2 EMPLOYED PART TIME
3 EMPLOYED FULL TIME
4 STUDENT, EMPLOYED OR NOT
5 RETIRED
6 HOMEMAKER

Q22. What is the highest level of education you have completed?

1 ELEMENTARY SCHOOL
2 HIGH SCHOOL
3 SOME COLLEGE OR UNIVERSITY
4 COMPLETED A COLLEGE DIPLOMA/CERTIFICATE
5 UNDERGRADUATE DEGREE COMPLETED
6 GRADUATE DEGREE COMPLETED

Please use the space below for any further comments regarding your volunteer experience.

Please return your completed questionnaire to volunteer@geog.uvic.ca

or mail it to:

Conservation Volunteers Study
Po Box. 49009
Victoria, BC
V8P 5V8

Appendix C Organization letter of consent

A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT

Dear *Organization name*,

You are being invited to participate in a study entitled A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT that is being conducted by ANGELA HUNTER who is a Graduate Student in the Geography Department at the University of Victoria and you may contact her if you have further questions by calling (250) 721-7345.

As a Graduate student, this research is part of the requirements for a Master of Arts degree and it is being conducted under the supervision of Dr. Rick Rollins. You may contact the supervisor at (250) 816-9124.

The purpose of this study is to gain an understanding of conservation volunteers, specifically what motivates them to begin volunteering and what contributes to their satisfaction and decision to remain as a volunteer. This is achieved by examining volunteer management strategies implemented by conservation organizations and through the measurement of volunteer motivations and satisfaction with different aspects of their volunteer experience. This research is important because it examines strategies that maximize the effectiveness of volunteer programs while maximizing volunteer satisfaction and benefits. The results of this study will contribute to the development of improved volunteer management strategies within conservation organizations.

You are being invited to participate in this study because the volunteer management strategies of nonprofit conservation organizations within the Capital Regional District are very important in our study. As a nonprofit conservation organization within the Capital Regional District, you have been selected to participate in this study. This study consists of four components. Please consider participating in all four components, however, it is possible to participate in only one or more if desired.

If you agree to voluntarily participate in the first section of this research, your participation will include A 20 minute interview about your volunteer program that will occur at your convenience between August 15, 2006 and February 15, 2007.

The opinions of past and present volunteers within your organization are also important to this study. The second portion of this study will require that a questionnaire be distributed to active volunteers between August 15, 2006 and February 15, 2007. Preferably these questionnaires will be distributed in person by the researcher while the volunteer is engaging in volunteer activities. This would occur at large volunteer activities or when your organization has had the opportunity to inform volunteers about the research project and they have agreed to speak with the researcher. Also, if available, we would like to send out an invitation for volunteer participation in the study through your volunteer news letter or list serve email so that volunteers can approach the researcher if they are interested in participating.

The third portion of this study consists of past, or inactive volunteers. We would like to invite currently inactive volunteers to participate in the study. It possible, this would be done through a volunteer newsletter, list-serve email, or through a letter sent out by your organization

to your volunteer list that would describe the research and ask interested individuals to contact the researcher to participate.

Additionally, as the fourth section of this study that will supplement questionnaire items, we would like to request permission for the researcher to actively volunteer with your organization for a short period of time (one day or a regular short term position) if an appropriate short term volunteer opportunity exists. The researcher will use this opportunity to participate as a volunteer and to observe the administration and behaviour of volunteers to gain a deeper understanding of the role of volunteer management in influencing attitudes and participant satisfaction. Observation will occur in a natural setting and there will be no staging of events for research purposes. Any notes taken by the researcher will be completely anonymous, as the name of the organization will not appear in any notes regarding observed behaviours.

There are no known or anticipated risks to you by participating in this research, however the interview portion is expected to take approximately 20 minutes of your time to complete. The researcher has fully disclosed her role in the natural observation component of this study.

The potential benefits of your participation in this research include contributions to understanding volunteer management techniques as appropriate to management strategies within nonprofit conservation organization settings. Further, benefits to conservation and to subsequent conservation volunteers will accrue with additional knowledge of effective strategies to maximize the use of volunteers in conservation efforts and maximize volunteer satisfaction.

CONSENT TO PARTICIPATE:

I understand that the participation of the *organization name* is entirely voluntary and the organization's choice to participate will have no bearing on the organization whatsoever. The portions of this study in which the organization would like to participate in are:

- □ 1. An interview with the organization
- □ 2. Surveys with active volunteers
- □ 3. Surveys with past or inactive volunteers
- □ 4. Participant observation by the researcher as a volunteer

The organization can withdraw from this study at any time without any consequences or any explanation. However, if it does withdraw from the study after having participated in whole or in part:

- □ I agree that data about the organization which has been provided and collected may still be used in the final analysis.
- □ Data about the organization that has been provided and collected may not be used in the final analysis.

- □ I agree that survey data from past and/or present volunteers which has been provided and collected may still be used in the final analysis.
- □ Data collected from past and/or present volunteers may not be used in the final analysis.

I understand that participation in this study is completely voluntary, there are no anticipated risks as a result of participating, and that all of the collected data will remain confidential as all completed surveys, notes, and diaries will be kept in a locked cabinet in a locked room which will only be accessible to the researcher and her direct supervisor (named above). I understand that all of the individual questionnaires, notes, and diaries will be destroyed

(shredded) upon completion of the research, and only summarized, tabulated and statistical information from the questionnaires will be reported in any results made available to any persons other than the interviewer.

I understand that because of the small number of conservation organizations within the capital regional district it is possible that individuals may be able to identify the organization from the research results. However, I understand that the names of participating organizations will not be named in the research results in an attempt to maintain the confidentiality of the organization. Wile analyzing volunteer responses, I understand that surveys will be connected to the corresponding conservation organization, however, the organization will not be named in the research results.

I understand that it is anticipated that the results of this study will be shared with others mainly through one primary outlet: a Master's Thesis to be held at the University of Victoria and the National Library of Canada. I am also aware that a copy of this work may be provided to the participating conservation organizations. I also understand that dissemination of research results may also occur through academic journal publications, conference presentations and proceedings, and presentations to nonprofit organizations.

In addition to being able to contact the researcher and her direct supervisor at the above telephone numbers, I may verify the ethical approval of this study, or raise any concerns I may have, by contacting the Associate Vice President of Research at the University of Victoria at (250) 472-4545.

My signature below indicates that I have read and fully understand the above conditions of participation in this study and that I have had the chance to have any questions I may have regarding this study answered by either the researcher and/or her direct supervisor.

Participant Signature: _____

Organization:_____

Date:_____

A COPY OF THIS LETTER OF CONSENT WILL BE LEFT WITH YOU, AND A COPY WILL BE RETAINED BY THE RESEARCHER.

THANK YOU IN ADVANCE FOR YOUR PARTICIPATION

Appendix D Organization quesionnaire

A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT

1) Does your organization have a designated volunteer coordinator?

   YES

   NO

2) About what percent (%) of your operating and administration budget does your organization allocate for volunteer management (recruitment, training, recognition)?

   _____

3) Approximately how many active volunteers did you have last year? _____

4) If known, approximately how many volunteer hours were completed with your organization last year?

   _____

5) Please indicate the approximate number of volunteer hours (or % of total volunteer hours) devoted to each of the types of tasks listed below

   _____A. Regular administrative support (on a set schedule over a long period of time for secretarial, media relations etc.)

   _____B. Occasional administrative support (short term help, such as preparing mail-outs).

   _____C. Community outreach and education programs.

   _____D. Event organization and planning (leadership role).

   _____E. Short term event assistant (eg. assist with fundraisers, community events).

   _____F. Conservation or restoration field work.

   _____G. Research and monitoring.

   _____H. Non-event fundraising (eg. Canvassing, membership drives).

   _____I. Other (please describe): _____

6) Please indicate the degree to which your organizations implements the following management practices

	NOT AT ALL	ADOPT TO SOME DEGREE	ADOPT TO LARGE DEGREE
A. Regular supervision of volunteers	1	2	3
B. Regular communication with volunteers	1	2	3
C. Liability coverage or insurance protection for volunteers	1	2	3
D. Screening procedures to identify suitable volunteers	1	2	3
E. Written policies and job descriptions for volunteer involvement	1	2	3
F. Recognition activities, such as awards ceremonies for volunteers	1	2	3
G. Annual measurement of the impacts of volunteers	1	2	3
H. Training and professional development opportunities for volunteers	1	2	3
I. Training for paid staff in working with volunteers	1	2	3

7) To what extent do volunteers provide benefits to your organization?

	GREAT EXTENT	MODERATE EXTENT	NOT AT ALL
A. Cost savings.	1	2	3
B. More detailed attention to your mandate.	1	2	3
C. Increased public support for your programs, or improved community relations.	1	2	3
D. Increased quality of services or programs you provide.	1	2	3
E. Capability to provide services or levels of service you otherwise could not provide.	1	2	3
F. Access to specialized skills possessed by volunteers, such as legal, financial, management, or computer expertise.	1	2	3
G. Other (please specify) _____	1	2	3

8) To what extent are the following issues a problem for your organization?

	BIG PROBLEM	SMALL PROBLEM	NOT A PROBLEM
A. Recruiting sufficient number of volunteers.	1	2	3
B. Recruiting volunteers with the right skills or expertise.	1	2	3
C. Recruiting volunteers available during the workday.	1	2	3
D. Recruiting long term volunteers	1	2	3
E. Indifference or resistance on the part of paid staff or board members toward volunteers.	1	2	3
F. Lack of paid staff time to properly train and supervise volunteers.	1	2	3
G. Lack of adequate funds for supporting volunteer involvement.	1	2	3
H. Regulatory, legal, liability constraints on volunteer involvement.	1	2	3
I. Volunteers' absenteeism, unreliability, poor work habits or work quality.	1	2	3
J. Other (please specify) _____	1	2	3

9) How many full and part time staff do you have working in the Capital Regional District?

FULL TIME _____

PART TIME_____

10) If there is anything else you would like to discuss regarding volunteers and your organization, please use the space below.

Part 2:

A STUDY OF CONSERVATION VOLUNTEER MANAGEMENT WITHIN THE CAPITAL REGIONAL DISTRICT

11) Do you any of your employees who work with volunteers have any formal training in volunteer management? (if yes, please describe).

YES

NO

Describe:

12) Scenario: A person calls you and says he/she wants to volunteer. Please describe the process that you go through from this point on.

13) Looking at your distribution of volunteer hours, (Q5), why does your organization use volunteers primarily in _____ areas? (refer to high and low skilled opportunities.)

14) You indicated that your organization adopts _____to some degree or not at all. (Q6) Do you think these practices could help your organization if they were implemented? What keeps you from implementing these practices?

15) (Q7) What is the main reason your organization uses volunteers? How would your organization be affected if you did not have any volunteers?

16) What is the biggest challenge you face when working with volunteers?

17) What are you doing to overcome these challenges?

18) How often do you review your volunteer program?

_____

19) If there is anything else you would like to discuss regarding volunteers and your organization, please use the space below.

THANK YOU FOR YOUR PARTICIPATION