LEAVE NO FAMILY INSIDE: IMPACT OF BOSTON SCHOOL FOREST FAMILY PROGRAMS ON VARIABLES OF ENVIRONMENTAL SENSITIVITY

by

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ABSTRACT

Leave No Family Inside:
Impact of Boston School Forest Family Programs on Variables of Environmental Sensitivity

Within the field of Environmental Education (EE), the development of Environmental Sensitivity (ES) can be thought of as a developed empathy for the outdoor environment. Past research consistently suggests that the development of ES is vital to the development of environmental interest and action. Sivek (2002) indicates two key factors in the development of ES: time spent outdoors over an extended period of time, and role models. Caduto (1983) asserts that experiential learning is an effective approach in achieving environmental values, including ES. This effectiveness multiplies with greater time spent outdoors as a family, and over an extended period of time. Confidence in initiating outdoor activities - with parents as role models - comes with the knowledge and resources available through an initial source.

In April 2006, the Boston School Forest (BSF) in Plover, Wisconsin surveyed parents, teachers and principals from the Stevens Point Area Public Schools. Many parents expressed a desire to attend family oriented programs similar to those their children routinely experience at the BSF. In order to counter effects of nature-deficit disorder (Louv, 2008), the Leave No Family Inside (LNFI) project hopes to help create a healthier community by guiding parents and children in outdoor activities.

The LNFI project includes the piloting and study through evaluation of a series of new family-oriented place-based educational programs at the BSF throughout 2007-2008. The project’s programs are free and open to the community. Grants awarded by the Wisconsin Environmental Education Board, the Community Foundation of Portage County, and the University of Wisconsin-Stevens Point Student Research Fund provide the funds for additional resources given to LNFI program families (and Midwest EE Conference 2007 participants). These grants also provide the salary for the BSF staff that led the LNFI programs. LNFI programs are free to participating families.

LNFI program themes include sustainability education and environmentally based low-impact activities. Individual LNFI programs include Leave No Trace Family Camp; Questing and Geocaching; Cross-Country Ski Tour; an expansion of the current Family Snowshoe Adventure; and Earth Day Celebration. Following each of the LNFI programs, families take informational resources and additional equipment with them that will enable them to independently pursue time outdoors as a family.

As part of the first four of five LNFI programs, participant family groups were asked to complete a consent form and three written questionnaires. Those adults that chose to complete a pre and post-assessment written questionnaire on site during the day of their LNFI program were asked to complete a second post-assessment written questionnaire two weeks following their LNFI program (this second post-assessment was provided for them in a self-addressed and stamped envelope at the LNFI program). The three assessments focused on measures of ES: time spent outdoors as a family group; the adults’ confidence initiating similar outdoor activities with their family group; and continued interest in the LNFI program activities. The second post-assessment evaluated the additional resources and equipment given to the family group, as well. Each assessment also measured the family groups’ satisfaction with past and present BSF programs.
Out of 91 family groups attending, 82 groups participated in the assessment process; 26 groups completed all three assessments. Initial results strongly support past research indicating role models and time spent outdoors as influential variables in the development of ES (Sivek, 2002). Data supports the creation and implementation of the programs as beneficial and in demand for families within the community (in part due to the programs’ accessibility and convenience, geographically and economically). Materials used during and taken home by adult participants following the LNFI programs are found to be more useful than not useful. BSF staff serve as positive role models for parents during the LNFI programs, and the programs have a positive influence on the adult participants’ interest in initiating similar activities with their family. Adult participants’ confidence levels in initiating similar activities and self-reported levels of raised ES following the LNFI program participation are both positively affected by the LNFI programs. In effect, the LNFI program adult participants become role models for their children’s development of ES; the level of environmentally sensitive and environmentally literate citizens is impacted through family programs such as the LNFI programs.

In Summer 2008, a LNFI Guidebook was compiled, containing LNFI program descriptions, materials used during the preparation of each LNFI program (including materials already present at the BSF), media coverage of the LNFI programs, LNFI program evaluation templates and initial evaluation results, and an overall resource bibliography. This Guidebook may be evaluated by other Wisconsin School Forests, and is available for use in outdoor family program development (see attached CD-ROM).
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In October 2007, Boston School Forest Director Karen Dostal and I met and started talking about possible projects at the BSF that could result in a thesis project and study. Within a few weeks we decided upon an outline of family programs, and began the grant writing process. As LNFI Project Coordinator, I have had a very rewarding, well-rounded experience in learning how to develop, coordinate, lead, and evaluate outdoor family programming.

Before thanking those specifically involved in the LNFI project, I would like to first acknowledge the people and related experiences that have led to the determination I utilize in accomplishing this project.

In thanking those that have helped foster a sense of wonder for the natural world, I must start with my parents, Douglas and Karen Hill. They have always believed in and passed on a love and tenderness for the natural world. This includes to a great degree our spending of time together outdoors as a family. Without their guidance in my education and unfailing belief in my perseverance, there is little doubt that I would have been able to accomplish this project. They have always been there for me, and have fully supported my studies in music, psychology, environmental studies, and now environmental education.

Throughout my education, I have had a number of teachers and mentors who have influenced my development of environmental sensitivity and interest in the interaction of people with the natural environment. Towards the end of high school, I had the privilege of volunteering at the Aldo Leopold Nature Reserve in Baraboo, WI. There, I met and worked with Nina Leopold Bradley and a group of UW-Madison graduate students who were conducting research on and around the reserve. The hands-on experience alongside observing their ethic for the land was infectious, and contributed towards my interest in pursuing environmental studies in college.

In college, I worked with Dr. Colleen Moore at the University of Wisconsin-Madison; our psychology lab completed an original study in relation to people’s perceptions of environmental issues. This experience sparked my curiosity in wanting to share what we learned with a general audience. In volunteering as a leader of a new after-school science club under Dolly Ledin’s “Adult Role Models in Science” program, she pushed me to create activities and lead the students in sharing their accomplishments with their parents. I found this task to be very enjoyable, and decided to seek out more experience in the field of environmental education.

While serving as a summer co-instructor for the Teton Science Schools Junior Science School programs in 2005, I received mentorship from TSS graduate students and
staff in curriculum development, teaching, and evaluation. This positive experience led me to apply for graduate programs in environmental education. But before beginning my master’s at the University of Wisconsin-Stevens Point, I had the chance to work as a naturalist intern with the International Crane Foundation in Baraboo, WI. This work broadened my comfort level in public speaking, allowed me to work with a large number of people across a wide expanse of ages, and to become familiar with a specialized area in the field of interpretation. It was an honor to serve as a representative of this world-renowned organization.

To thank those specifically involved in the LNFI project:

First of all, I must thank UW-SP for awarding me a graduate assistantship through their College of Natural Resources. Without this position, I would not have had the opportunity to create the LNFI project and study. The UW-SP College of Natural Resource’s CNR News newsletter recently included a brief review of the LNFI project, which noted two members of my graduate committee.

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Thank you to the Wisconsin Center for Environmental Education’s School Forest Specialist Jeremy Solin: for his support and input in program development and formulation and distribution of the LNFI Guidebook. He recently provided space for me to include a description of the LNFI project, study results, Guidebook and contact information in the Summer 2008 LEAFlet newsletter.

Thank you to the Wisconsin Association for Environmental Education for the opportunity for Karen Dostal and I to co-present the LNFI project and study during the 2007 Midwest Environmental Education Conference. During our concurrent session, the presence of and questions from the nearly 100 participant educators boosted our confidence in the growing interest of outdoor family programming. Dr. Julie Ernst, an Assistant Professor at the University of Minnesota-Duluth, also presented at the 2007 MEEC, and was helpful in providing me with additional materials related to her research of environmental sensitivity and environment-based education. MEEC keynote speaker Richard Louv provided additional grounds for inspiration and justification of the LNFI project, as well. His 2008 edition of Last Child in the Woods supports ES development research and outdoor family programming development and implementation.

Julie Fox of the WI DNR attended our 2007 MEEC session, and is the source to thank for the invitation for Karen Dostal and I to co-present the LNFI project, study and Guidebook during the 2008 Wisconsin State Park System Interpretation Workshop.

A huge thank you to the Boston School Forest Staff: Sue Anderson, Gary Glennon, Pat Hoffman, and Sandy Masterson. These four individuals helped co-lead almost every LNFI program, and have aided greatly in my orientation and preparation of the program materials and activities (they have also welcomed myself and my fiancé, Ethan Lewis, as BSF staff). Ethan has played a vital role in personal support of this project, and has generously lent his time and outdoor education expertise as a co-leader of most LNFI programs. Kent Hall, Ginamaria Javurek, Jim Jocque, UW-SP WI Camps Organization volunteers and fellow UW-SP graduate students have contributed their time and experience to LNFI programs, as well. Mr. Jocque led a “Leave No Trace Ethics” workshop during Leave No Trace Family Camp 2007, as well as snowshoe games during Family Snowshoe Adventure 2008. Mr. Hall (of the Central WI Aldo Leopold Audubon Chapter) led popular birding hikes and Ginamaria (a UW-SP graduate student) gave a well-attended family program featuring Archimedes (a Great Horned Owl) during Earth Day Celebration 2008. UW-SP graduate students Ali Cordie, Stefanie Miller, Scott Reilly, Ximin Wang and Lindsey Wood helped as volunteers and Flying WILD activity facilitators during Earth Day Celebration 2008. UW-SP WI Camps Organization undergraduate volunteers Samantha Bizeau, Jason Davis, Jason Flyte, Lacey Humphrey, and Erin Kruger helped staff the Cross-Country Skiing for Families 2008 program; we could not have handled the program’s nearly 200 attendees without their help! Lacey also contributed her expertise during Family Snowshoe Adventure 2008.

Following (and sometimes during) almost every LNFI program, we received press. I would like to thank WAOW Newsline 9 of Wausau, WI, for covering Leave No Trace Family Camp 2007 and Geocaching and Questing for Families 2007, both on television and their web site. The Portage County Gazette’s Gene Jacobs provided in-depth coverage of Leave No Trace Family Camp 2007 and Cross-Country Skiing for
Families 2008 (by request due to attendance). The Stevens Point Journal’s Shenandoah Sowash took the time to follow-up on a UW-SP press release I had written on behalf of the LNFI project, and interviewed Dr. Lackey, Karen Dostal and myself before publishing a thorough article on behalf of the LNFI programs and related research.

Before each LNFI program, Karen Dostal and I prepared a program-related media release that was sent to area newspapers and the Stevens Point Area Public Schools. A thank you to all of those in this school district for passing on those media releases and program related letters to families. Also, a thank you to the area businesses, public libraries, and nature reserve that agreed to display an advertisement poster for each LNFI program. Certain supplies, such as plastic containers used to make bird feeders at Earth Day Celebration 2008, were donated by area businesses, as well; thank you for your generosity. And, a class of area sixth grade students aided in creating posters for Earth Day Celebration 2008 as part of their service learning requirement at the BSF. They did a wonderful job in helping us coordinate those visuals!

A sincere thank you to all participating LNFI program families between July 2007-April 2008. Their enthusiasm, thorough verbal and written feedback, and support of the LNFI programs have been a joy to share.

The BSF has existed within this community for 71 years. Therefore, to see an outline of family programs created only 18 months ago come to life, receive such thorough, positive feedback and reach so many people both directly and indirectly has been a humbling experience. I have highly enjoyed being part of this community.

In the editing of the final version of this document and the LNFI Guidebook, Dr. Paula DeHart, Karen Dostal, Karen Hill, Dr. Brenda Lackey, and Dr. Daniel Sivek each gave their time and thorough input in helping clarify wording and presentation. Thank you each so very much for your detailed feedback!

Thank you to the North American Association for Environmental Education for the opportunity for Karen Dostal and I to co-present the LNFI project, study and Guidebook during the upcoming fall 2008 NAAEE Annual Conference in Wichita, Kansas. We look forward to our Roundtable Discussion session, and to where this collaboration may lead!

It is with deep gratitude that I recognize all of these individuals and places that have aided in the path to creating the LNFI project. I advocate that these well-received programs continue in this community, and can both here and elsewhere continue to serve as a template in bringing families together outdoors (...as we all continue to develop our environmental sensitivity and familial connections with the natural world!).

Emily A. Hill
July 2008
Chapter 1
INTRODUCTION

In April 2006, the Boston School Forest (BSF) surveyed parents, teachers and principals from the Stevens Point Area Public Schools. Regarding the results of this survey, many parents expressed a desire to attend family oriented programs similar to those their children routinely experience at the BSF. In order to counter effects of nature-deficit disorder (Louv, 2005), the Leave No Family Inside (LNFI) project was developed to promote a healthier community by guiding parents and children in outdoor activities. The LNFI project consists of a series of new outdoor family programs, which were initially developed and studied consecutively throughout July 2007 to April 2008. The LNFI project will also increase opportunities for family participants to spend time together outdoors. In doing so, LNFI has the potential to increase the confidence of parents in being outdoor role models for their children, and has the potential to foster an increased environmental sensitivity for the families involved.

Research Problem

The purpose of this study is to examine the environmental education construct of environmental sensitivity by piloting and evaluating family-oriented, seasonal place-based outdoor recreation and educational programs at the Boston School Forest. The programs emphasize living in a sustainable manner, having low-impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest.
Subproblems

I. Develop diverse family-oriented, place-based educational programs for year-round use at the Boston School Forest.

II. Determine whether or not the compilation of activities related to living in a sustainable manner, having low impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest are in demand and beneficial for families attending evening and weekend programs at the Boston School Forest.

III. Assess the influence of guided experiences in the development of environmental sensitivity on adult program participants.

Objectives

• To demonstrate the effects between exposures to environmentally sensitive role models on participants at the Boston School Forest and a higher confidence in initiating similar activities with their family outside of the Boston School Forest LNFI programs.

• To identify if families attending the new Boston School Forest LNFI programs consider the distribution of related resources more useful than not useful.

Delimitations

• This study is selective regarding the structure and content of its family-oriented, place-based educational programs.

• This study will involve the participation and evaluation of a limited pool of participants.
• This study will not include all possible uses of program content or related resources provided for program participants.

Definitions of Terms

Boston School Forest

Established in 1937 and located in Plover, Wisconsin, the Boston School Forest (BSF) serves as a center for environmental education programs for area K-6 students and families throughout the Stevens Point Area community. Over 5,000 students are involved in BSF educational programs each year, with an additional 4,000 visitors annually. Summer school and youth groups reserve the facility most weekends. Accommodation for students with special needs is emphasized. All programs are carried out by the BSF staff, and are often assisted by parent and high school student volunteers, and students from the University of Wisconsin-Stevens Point. The BSF’s hands-on approach and outdoor K-6 activities correlate with the schools’ associated grade level curricula, and are based on Wisconsin State Educational Standards. According to the BSF website, “In this way the school forest becomes a natural living laboratory that supports classroom learning.”

Environment-Based Education

This is a form of school-based environmental education in which an instructor incorporates the local environment as a context for integrating subject areas. Environment-Based Education provides a source of real-world learning experiences.

Environmental Education

Environmental Education is the process of achieving environmental literacy, and so
ultimately, maintaining responsible environmental behavior, as accomplished through the sequential development of an environmental ethic. First, a development of basic environmental awareness is necessary. Second, a development of environmental values is achieved through learned knowledge of the interrelatedness between people and their biophysical surroundings. It is then recommended to develop the skills and attitude necessary to understand and appreciate the abovementioned learned knowledge, including practice in decision-making and the self-formulation of a code of behavior for issues concerning environmental quality. The final step, and ultimately maintaining an environmental ethic, is through repeated environmental action.

**Environmental Ethic**

This is a personally developed understanding of and relationship with held values concerning the greater natural environment. These values are achieved over a prolonged period of time throughout each developmental cognitive stage and the sequential developmental focuses of environmental education.

**Environmental Literacy**

This is when a person has achieved the five sequential focuses of environmental education: awareness, knowledge, attitude & values clarification, skills, and commitment to citizen action participation, they are said to be environmentally literate. In other words, they are able to understand and react in relation to the different dimensions within the natural environment and its related social issues.

**Environmental Sensitivity**

Environmental Sensitivity is prevalent when a developed empathy for the natural environment is present, a contributing factor in environmental education’s teachings of
responsible environmental behavior. Role models and prolonged experience outdoors contribute to a more thorough development of environmental sensitivity.

**Experiential Education**

In experiential education, the student becomes more actively involved in the learning process than in traditional, didactic education. Experiential educational goals can be effectively met by allowing the nature of a learner's educational experience to influence the educational process.

**Family-Oriented Educational Programs**

This is an educational program that is designed for a combined adult and child audience.

**Low-Impact Interaction**

Low-impact interaction allows a thorough interaction with the natural environment, yet does not initiate negative ecological change in the natural environment.

**Place-based Education**

The style of education where the objective is structured around a given area, generally an immediate area familiar to the student.

**Responsible Environmental Behavior**

The ultimate goal of Environmental Education, an environmentally responsible citizen will responsibly demonstrate this behavior to reflect awareness, knowledge, attitude, and skills towards helping maintain a healthier greater natural environment. This behavior is accepted as achieved after the development of environmental sensitivity and environmental literacy.

**Sustainability**

When there is little to no net degradation to the quality or amount of natural resources
used in a given natural or built area; when a continuous, self-supporting cycle of action is achieved.

**Abbreviations**

BSF is the abbreviation used for the Boston School Forest.

EBE is the abbreviation for Environment-Based Education.

EE is the abbreviation used for Environmental Education.

EL is the abbreviation used for Environmental Literacy.

ES is the abbreviation used for Environmental Sensitivity.

LNFI is the abbreviation used for the “Leave No Family Inside” WEEB grant written by Karen Dostal and Emily Hill (2007), and is the overall name of the family programs piloted and evaluated within this study.

MEEC is the abbreviation used for the 2007 Midwest Environmental Education Conference.

REB is the abbreviation used for Responsible Environmental Behavior.

WEEB is the abbreviation used for the Wisconsin Environmental Education Board.

**Assumptions**

- There will be little conflict in utilizing the BSF’s current educational materials, and in conjunction with outside resources, organize family-oriented place-based educational programs and provide useful related resources involving: living in a sustainable manner, having low-impact interaction with the greater natural environment, and learning about the cultural and natural history of the Boston School Forest.
• There will be collaborative interest between members of the BSF staff and families of Boston School Forest K-6 students and surrounding Stevens Point, Wisconsin community members to utilize this project’s family-oriented place-based educational programs and resources.

• Given the voiced demand for more family-oriented programs at the Boston School Forest by participants in the BSF Environmental Education Program Survey 2006, the implementation of such programs will be well attended and received.

• The programs developed within this study will receive adequate funding in order to achieve their initial piloting and evaluation.

**Importance of Study**

In April 2006, the Boston School Forest (BSF) in Plover, Wisconsin surveyed parents, teachers and principals from the Stevens Point Area Public Schools in order to document the benefits and interest in current and possible expansion of programs provided by the BSF. Regarding the results of this survey, many parents expressed a desire to attend family-oriented programs similar to those that their children routinely experience at the BSF. Parent comments indicated a common interest in spending greater time with their family in the outdoors, including at the BSF. “Parents would like to participate in guided activities so that they can try new outdoor recreation activities and learn along with their children” (Dostal & Hill, 2007). The following two comments are taken from the “Parent Comments” section from the Boston School Forest Environmental Education Program Survey (Dostal, 2006):
“It is imperative that the Boston School Forest continues and expands its programs and outreach. Kids need to know there’s more to the world than the walls around them at school and home (p. 9).”

“Environmental education is mandated by law and even if it weren’t – nothing can replace hands-on learning by being outdoors and create a genuine caring for the environment as well as seeing how we are all connected. I would like to see the BSF used more for schools as well as public and family programs. There is no such facility nearby (p. 18-19).”

Since February 2002, the BSF has held one family-oriented program, an annual evening Snowshoe Hike. This one event has become so popular that the BSF staff is at times unable to accommodate everyone who wants to come. A parent answering the BSF Environmental Education Program Survey (2006) noted:

“We tried to attend a family snowshoeing activity this winter with our school and were unable to do so because there wasn’t room. I’d love to see more opportunities for students and families (p. 8).”

This study includes the development, piloting and evaluation of four additional family-oriented programs at the BSF from July 2007 to April 2008, and will increase opportunities for family participants to spend time together outdoors. In doing so, this study has the potential to increase the confidence of parents in being outdoor role models for their children. This study also has the potential to raise participant families’ confidence in initiating similar activities on their own, a pattern endemic to increased Environmental Sensitivity (ES). There is little research disclaiming ES as an established construct of environmental education. Past research consistently shows that the development of ES is vital to the development of environment interest and action. Sivek (2002) indicates two key factors in the development of ES: (1) time spent outdoors over an extended period of time, and (2) role models. Caduto (1983) asserts experiential learning as an effective approach in achieving environmental values, including ES. This
effectiveness multiplies with greater time spent outdoors as a family, and over an extended period of time. Confidence in initiating outdoor activities (with parents as role models) comes with the knowledge and resources available through an initial source. The Leave No Family Inside (LNFI) programs are largely experiential in nature. Families who participate in these programs have the opportunity to develop environmental sensitivity and parents may develop confidence as role models in the outdoors (Dostal & Hill, 2007).

In May of 2007, the BSF celebrated its 70th Anniversary. According to BSF Director Karen Dostal,

“The BSF is an important community resource where place-based education occurs. Through its school programming the BSF has met with success in getting adults and children to develop an interest in spending time together in the outdoors (personal communication, 2007).”

The following quote from the BSF Environmental Education Program Survey (2006) illustrates an example of this success:

“Our family does not camp. We are not the “outdoors” type, so when our children have the opportunity to learn from Boston School Forest, we are thrilled! They love it! They have gained a great appreciation and love for the outdoors, and we are now taking nature walks together and even planning to hike this summer (p. 10).”

Through this project, the researcher hopes to increase the number of parent role models in the central Wisconsin community; the researcher hopes to increase their confidence and comfort in initiating environmental and recreational activities, as well.

With the appropriate monetary support, continuation of this study can also help further the analysis of family-oriented educational programs, piloted at one of the most well-established and utilized School Forests in the state of Wisconsin. The topics of this study’s proposed activities are geographically generalizable to family audiences. LNFI
program descriptions, resources used in the program development and distributed during
the programs, media coverage of the programs, as well as assessments used during the
2007-2008 LNFI pilot program series are compiled as the LNFI Guidebook (See attached
CD-ROM for an electronic version of the LNFI Guidebook). The LNFI Guidebook will
be utilized in further programming at the BSF, and is available for additional use in
family program development elsewhere.

The desire for the expansion of family-oriented place-based experiential EE
programs at the Boston School Forest in Plover, Wisconsin, is clear. Since 1983, the BSF
has provided successful experiential EE programming within a community that supports
and remains strongly interested in broadening their educational and recreational
opportunities outdoors. The Stevens Point, Wisconsin community’s spoken desire for a
greater provision of BSF family programs echoes supporting research regarding what
processes are necessary to achieve a successful EE. Families that attend the LNFI
programs at the BSF, including a place-based natural and human history guided Quest,
may develop a greater sense of place and confidence in initiating similar activities
amongst themselves elsewhere. And in attending one or more of the LNFI programs,
these families may develop a strong ES, leading towards a greater Environmental
Literacy (EL).
Chapter Two

LITERATURE REVIEW

Each of the following sections discusses variables within EE that are interrelated in their philosophy and integral to the overall development of Environmental Sensitivity (ES), a variable necessary within the development of complete Environmental Literacy (EL). Continuing research in the development of Environmental Literacy (EL), Experiential Education, adult Environmental Sensitivity (ES), and the use of Place-based and formal Environment-Based Education (EBE) support the relationship between the influence of adult role models and time spent outdoors and the development of ES. This relationship spans both formal and informal routes of learning. Recent research points to the necessity of a well-developed ES as one of the leading factors in allowing for teacher comfort in utilizing EBE (Ernst, 2007b).

The influence of role models and time spent outdoors affects the development of ES in adults, as well. Outdoor family programming may be a catalyst in promoting the development of ES in adults, affecting their confidence level as a role model for youth. In relation to the following variables’ influence on the development of ES, without outdoor family programming, current societal changes in outdoor recreational habits may continue to indicate a lowered rate of ES (Pergams & Zaradic, 2008), and therefore, EL.

Developing Environmental Literacy

Achievement of Environmental Literacy (EL) – thorough recognition of our ecological impact upon the greater environment, related issues, and possible solutions –
is a key goal of Environmental Education (EE). The development of EL depends upon eight variables, including Environmental Sensitivity (ES), “a feeling of empathy towards the environment” (EETAP, 2002). According to EETAP (2002), EL “…consists of cognitive and affective attributes that lead individuals toward environmentally responsible behaviors (REB).” ES highly affects the behaviors of the environmentally literate. Sivek (2002) states, “Environmental sensitivity is another variable that appears to be an important precursor to EL… As a precursor to EL, it is important for educators to better understand ES and to facilitate its development in learners (p. 155).” The results of Sivek’s 2002 study indicate two key factors in the apparent development of ES: time spent outdoors over an extended period of time, and role models. How can we incorporate these two factors and in so doing achieve ES, let alone advance a person’s EL in a dynamic, effective sequence?


“If a child is to keep alive his inborn sense of wonder… he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in (p. 55).”

Over fifty years ago, Carson proposed how important both time spent outdoors and role models are in the development and maintenance of ES. By doing so we can then more readily develop empathy for the world we live in, and remain fascinated and full of wonder through our personal connection and understanding of the natural environment and issues connecting us with that environment. The importance of action learning through consistently experiencing the natural world first-hand is the surest way to remain
in touch with our sense of awe, and therefore act responsibly towards the natural environment.

**Importance of Experiential Education**

Caduto (1983) asserts, “Because of the nature of environmental education, especially that which occurs outdoors, action learning is an integral, vital part of any environmental education program.” Action Learning, one of eight accepted ‘Environmental Values’ EE teaching methods, continues to grow in its effective and widespread approach. Here, experiential learning is emphasized as an effective, though unsystematic approach in achieving environmental values, including ES.

Recent EE resources support outdoor experiential learning (EETAP Resource Library Number 114, p. 1, 2002):

“…Experiences in the outdoors, where there is direct interaction with natural, rural, or other relatively pristine habitats, have been identified as one of the main formative influences that lead to REB. These out-of-doors activities can act as major precursors for environmental sensitivity. Of all the factors that influence environmental sensitivity, studies have indicated that the influence of outdoor experiences has consistently shown up as the most important influence.”

As mentioned earlier, responsible environmental behavior (REB) is essentially the final step in achieving EL, and the processes utilized to achieve a complete EE. Several methods are applied in evaluating a student’s understanding of materials, let alone REB. Action Learning through place-based experiential activities appears to be a repeated, successful choice. According to Sobel (2005),

“Place-based education…increases academic achievement, helps students develop stronger ties to their community, enhances students’ appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens (p. 7).”
In support of Sobel’s (1996) above argument, Gilliam & Lane-Zucker (Sobel, 1996) conclude that the evaluation of place-based programs is highly important in understanding the long-term effects of the experience not only on the students, but also everyone involved in the process:

“We have seen teachers, students, and members of a community transformed as a result of their participation in a ‘place-based’ environmental education. Their confidence in the educational process is renewed and they inevitably come away with a far deeper sense of the natural and cultural web of life that defines their communities. This is a web that binds the generations and reinforces our sense of responsibility toward our places. It holds the stories and experiences that reveal a community’s true identity. And it reveals to us our own uniqueness as well as our connectedness with all life. Nature literacy, we believe, can rebuild communities (vi-vii).”

**Place-based Education**

Louv (2005) writes, “Nature inspires creativity in a child by demanding visualization and the full use of the senses. Nature still informs our years – lifts us, carries us (p. 7).” This concrete, basic use of our senses early in life helps us achieve a greater understanding of the natural world we inhabit. Louv is concerned about how sedentary our society has become in the last fifty years, one in which the focus of interest for more and more children starts indoors rather than outdoors. As a society’s sense of place changes to one of the indoors, its citizens grow more disconnected with the natural environment, and therefore unaware, of the effects their actions have on the health and well-being of the natural world, and therefore themselves. Louv has coined this tendency as “nature- deficit disorder.” And as of 2008, there is new evidence for a shift away from nature-based recreation. Pergams & Zaradic (2008) indicate a decline in visits to national U.S. parks, state U.S. parks, national U.S. forests, and per-capita duck stamps and fishing licenses obtained in the U.S. Between 1981 and 2008, there has been a -18% to -25% rate of decline in per capita nature recreation, and so the authors feel that attempts to raise
public awareness are less likely to succeed in changing the trend, let alone allow
continued support for current national biodiversity conservation efforts (Pergams &
Zaradic, 2008). Three of the four variables that explain 97.5% of this decline in park
visits are time spent with the following electronic media: the internet, playing video
games, and watching movies.

Luckily, the development of ES is a well-argued strategy for limiting this pattern
of disconnect between humans and the outdoor environment. As part of EE’s fifth and
final subgoal of citizen action experience, effective completion is recognized by a
combination of: greater knowledge of action strategies and issues, skills, internal locus of
control, ES, knowledge of ecological concepts, and an in-depth understanding of the
beliefs and values surrounding the subject. Currently, nationally recognized experiential
EE K-12 activity guides include the U.S. Department of Natural Resources Project
Learning Tree, Project WILD, Project WILD Aquatic, Project WET, and Flying WILD,
all of which comply with associated state EE standards. Many of these experiential
lessons emphasize the use of the outdoor classroom. But, a place-based outdoor
classroom may be essential for completing an effective citizen action experience.

Hines, Hungerford & Tomera (1987) demonstrated through a meta-analysis of
over 120 studies the modestly low knowledge-behavior correlation in relation to EE
citizen action experience. In other words, knowledge alone does not guarantee one’s
ability to act as a well-informed and prepared citizen regarding ecological issues. In order
for EE to be truly effective, all factors relating to the citizen action experience need be
observed. It can be argued that each of these factors can be augmented by experience-
based EE, with a focus on place-based EE.
In an assessment of Wisconsin public schools, Rossow (1994) found that, according to both urban and rural school administrators, greater time, funding and interest in EE is needed in order to increase EE throughout their schools and districts. The lack of support for EE from teachers was an influential “barrier” to promotion and implementation of EE. Support for EE is growing in some areas, although similar barriers exist over a wide area despite the advancement of and greater access to certification for various nationally recognized experiential EE activity guides. How can these barriers be broken down, regardless of location of the school and its surrounding community? One example includes building formal K-12 teachers’ ES to a level where they are comfortable utilizing Environment-Based Education (EBE) methods (Ernst, 2007b).

**Building Environmental Sensitivity: Environment-Based Education**

As stated above, building formal educators’ ES could reduce barriers of implementation of EE as part of K-12 schooling. Environment-Based Education (EBE) utilizes a school-based EE approach, including the local environment as the context for subject integration, and has been supported as educationally efficient as a high-quality EE approach (Ernst, 2007b, 15). But, relatively few teachers practice EBE on a regular basis, citing lack of EL knowledge and skills and ES as important in their decisions to use their abilities to implement EBE (Ernst, 2007b, 15). One suggestion for advancing ES in K-12 teachers includes greater exposure to EL knowledge and skills, in combination with the development of ES. Research involving implementation of EE by K-12 teachers (Ernst, 2007b) supports earlier EBE findings (Ernst, 2007a), in that *personal EL knowledge and skills, ES, and teaching context* for the teachers were the key influences on their use of
EBE. A development of adult (teacher) EL and ES can be achieved in training through outdoor programs that utilize role models.

What are the implications of not providing students with role models and outdoor experiences in a place-based setting? Clifford E. Knapp, K-12 teacher and teacher educator in the Curriculum & Instruction Department in the College of Education at Northern Illinois University focuses on the importance of models and outdoor experience in forming Environmental Ethics. Sivek (2002) demonstrates these focuses as most relevant and consistent in the development of ES, and EL. Knapp (1999) describes multiple types of environmental ethics, along a human-centered versus earth-centered ethic in relation to ES development. He states, “Another way to understand how to help develop an environmental ethic is to look for what is lacking when someone is judged not to have one.” Stephen Kellert as quoted by Knapp (1999):

> “An individual lacking an environmental ethic would have diminished emotional identification with nature and would place short-term needs over long-term obligations to the ecological community. Nature would be viewed as separate, alien, and lacking in inherent value or integrity. It would be viewed as inanimate and something to be manipulated and exploited (p. 49).”

**Summary**

As described earlier, trends in outdoor recreation indicate a waning interest by citizens of all ages. And as time with electronic media increases, visits to parks decrease (Pergrams & Zaradic, 2008). How does this translate for the future of our world’s environmentally literate citizenry? EBE is an effective approach for implementing formal EE, but is underutilized based on current K-12 teachers’ development of EL and ES. Similarly, there is more limited travel by schools to utilize outdoor programs. In order to increase EL and ES among the general populous (as well as formal educators),
opportunities must be provided for citizens of all ages, in which outdoor experiences and role models allow for their citizen participants’ further development of EL and ES. These experiences can be held in both non-formal and formal settings, and are highly effective when structured as place-based, experiential EE. Therefore, the future of our environmentally literate citizens may fall more heavily to parents. If more adults, namely parents, have access to such experiential outdoor programs, they can become additional role models, as well.

The LNFI project offers the opportunity to increase the time families spend together outdoors, and may therefore help increase the confidence of parents in being outdoor role models for their children. This, in turn, could foster an increased ES for the families involved. Confidence in experience and knowledge, and a well-developed ES is needed in order to implement outdoor environmental activities in both formal and non-formal EE settings. Research involving the importance of a well-developed ES in relation to attaining a thorough EL, and in turn a more thorough EE, supports time spent outdoors (Sivek, 2002). Recent literature is beginning to indicate a variety of benefits associated with spending greater time outdoors and as a family unit, as well.
Chapter 3
RESEARCH METHODS

The purpose of this study is to examine the environmental education construct of environmental sensitivity by piloting and evaluating family-oriented, seasonal place-based outdoor recreation and educational programs at the Boston School Forest. The programs emphasize living in a sustainable manner, having low-impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest.

Introduction

Following the fall 2006 Stevens Point Area Public Schools referendum, the researcher met with the Director of the BSF and brainstormed a series of new family programs for the BSF, the LNFI project. With respect to BSF’s philosophy of low-impact and seasonally-related environmental activities, an outline for the 2007-2008 LNFI program series was initially developed: Leave No Trace Family Camp, Questing and Geocaching for Families, Cross-Country Skiing for Families, Family Snowshoe Adventure (expanded from its initial offering since 2002), and Earth Day Celebration. Leave No Trace Family Camp was developed because of the BSF staff’s past interest in pursuing a Leave No Trace Ethics workshop at the BSF. By expanding this idea into a camp, the program could also integrate several activities and materials, and is a great kick-off to the LNFI program series. Questing and Geocaching for Families was developed due to an increased interest in Geocaching within the community, as well as
the revived nationwide interest in Questing and modern technologies behind Geocaching. The BSF currently has a Quest, written and used by students annually; the BSF also has Geocaching courses laid out, and BSF facilitators annually teach both compass and GPS orientation to elementary students. *Cross-Country Skiing for Families* was developed due to the community’s interest in winter recreation at the BSF; the BSF already utilizes cross-country ski trails with students, and has cross-country skis available for a wide variety of ages. *Family Snowshoe Adventure* has occurred at the BSF since 2002. *Earth Day Celebration* was developed to honor Earth Day, and emphasizes the seasonal benefit of bringing families to the BSF during that time of the year: there are plenty of migrating birds, other wildlife and new plants to observe! There is at least one LNFI family program designed to occur during each of the four seasons.

In order to fund the LNFI programs, the researcher and the Director of the BSF wrote and submitted two grant proposals, one to the Wisconsin Environmental Education Board (WEEB), and a second to the Community Foundation of Portage County (See Appendices A and B, respectively). Both of these 2007-2008 grants were awarded. The WEEB grant covered an 18-month timeline, from July 2007 to January 2009. Funding for the LNFI project from WEEB created the paid position of Project Consultant for the researcher, and funded the Director of the BSF and BSF staff when preparing, leading, and assessing all LNFI programs. Both of these grants also allowed the BSF to offer the 2007-2008 series of LNFI programs free to the public, and provided family participants of each LNFI program with additional program-relevant supplies and information.

After completing the *Web Tutorial for Human Subjects Protection Training*, the researcher applied for approval from the Institutional Review Board for the Protection of
Human Subjects at the University of Wisconsin-Stevens Point for their adult participant consent form and assessment materials. This approval was granted.

After the researcher received initial graduate advisor approval for this study’s thesis prospectus, the researcher applied and was accepted to present a concurrent session featuring the LNFI project during the 2007 Midwest Environmental Education Conference (MEEC). The LNFI programs mirrored the “No Child Left Inside” theme of MEEC; MEEC 2007 was held in Stevens Point, Wisconsin, and featured keynote speaker and noted author Richard Louv (this study supports Louv’s call for increased involvement in the outdoors). The researcher and Director of the BSF co-presented a background of the BSF and the LNFI programs, including preliminary assessment results from the initial two 2007-2008 LNFI programs, *Leave No Trace Family Camp* and *Geocaching and Questing for Families* (See Appendix C).

A culminating product of the LNFI programs and their evaluation is the LNFI Guidebook (See attached CD-ROM). In order to create the LNFI Guidebook, the researcher compiled the resources used during the LNFI programs’ development, activities incorporated during each program, and lists of supplies provided for participants at each program. Copies of the assessments, a data summary, and media coverage of the 2007-2008 LNFI programs are also included. This guidebook provides a framework for developing family-oriented experiential activities at other school forests and non-formal outreach nature centers. MEEC 2007 session and WI State Park System Interpretation 2008 workshop participants were given the option to sign up for an electronic copy of the LNFI Guidebook.
Throughout 2007-2008, the researcher and Director of the BSF coordinated and led the LNFI programs in conjunction with the BSF staff and volunteers. The same staff led each of the LNFI programs; additional program volunteers varied given the program structure and staff availability. Part of each LNFI program included the assessment of that program, distributed by the researcher and completed by one adult in each family group in the form of three questionnaires.

**Project Evaluation**

This study includes both qualitative and quantitative data; a mixed-methods approach, which was comprised of three written questionnaires. The first questionnaire was a pre-assessment, given before the start of each LNFI program (See Appendix D). The second questionnaire, a first post-assessment, was given at the end of each LNFI program (See Appendix E). The final questionnaire, a second post-assessment, was provided in a self-addressed, stamped envelope at the end of each LNFI program (See Appendix F). Adult participants were asked to complete and mail back this third questionnaire two weeks following their LNFI program.

Questions utilized in each assessment (See Appendices D-F) were similar in style and order as those outlined in Krueger’s assessment methodology, as described by Sivek (2002). The opening question is factually based, and introduces the topic. The second question further focuses this topic and allows for participants to reflect on past experiences. Next are transition questions, which lead to key questions, focusing completely on one topic of interest. Krueger’s approaches for the ending questions are varied, and were utilized by the LNFI researcher in that the final question on each LNFI
program assessment summarizes that assessment’s topics through a more general, open-ended question (Sivek, 2002, p. 157).

The researcher was interested in measuring the LNFI program participants’: amount of time spent outdoors with their family, what activities are completed outdoors with their family aside from the BSF program(s), the perceived value and quality of the LNFI program(s), and the likelihood that the families in attendance at the LNFI program(s) may initiate more similar activities on their own in the future. This latter measure of personal confidence and initiation demonstrates a change in ES for LNFI program adult participants, and was incorporated into each questionnaire, using Likert-type scales adapted from Archibald Sia (Sivek, 2002) (See Appendix G).

Incentives behind completing the three questionnaires included that each questionnaire was fairly short, the first two questionnaires were incorporated within the associated LNFI program’s activities, and free educational and recreational resources were offered both during and following the program as a thank you for participation. All LNFI programs were free to the participants.

**Project Evaluation Tools: Pre-Assessment Questionnaire**

Following completion of the Consent Form (see Appendix H), the first questionnaire was given to adult participants prior to each LNFI program (see Appendix D). This first questionnaire, titled pre-assessment, addressed subproblem I of this study: I. Develop diverse family-oriented, place-based educational programs for year-round use at the Boston School Forest.
The pre-assessment questionnaire was comprised of eight questions (see Appendix D). The pre-assessment questionnaire asked adult participants to rank and list past involvement in family programs or other programs at the BSF. It allowed space for adult participants to provide further comments regarding past BSF family programs they may have attended. It also asked adult participants to rate their interest, using a Likert-type scale of 1 (very low interest) to 5 (very high interest), for each LNFI program. The pre-assessment questionnaire also asked how frequently the adult participant initiated similar activities with their family outside of the LNFI programs, as well as which member(s) of their family influenced them to attend that day’s LNFI program. The pre-assessment also asked adult participants to rate their empathy for the outdoor environment on a Likert-type scale from 1 (very low) to 10 (very high). This measure of ES, adapted from methods used by Archibald Sia (Sivek, 2002), is based upon repeated observation that a self-reported level of ES was closely correlated to measures of participation in outdoor activities and environmental role models. Therefore, the researcher’s use of a scale (ranging from 1-10) is considered an effective and valid measure of ES. This question was repeated across all three questionnaires. The final question within the pre-assessment asked adult participants to provide any additional comments on their experience initiating outdoor activities with their families.

Demographic information collected on the pre-assessment included name, program title, date, number of adults, number of children (under 18 years of age), and zip code.
Project Evaluation Tools: First Post-Assessment Questionnaire

The first post-assessment questionnaire, given at the end of each LNFI program, was used to determine whether or not the adult participant felt as though they had gained related knowledge and/or skills during the LNFI program (see Appendix E). It also began to address subproblem II of this study:

II. Determine whether or not the compilation of activities related to living in a sustainable manner, having low impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest are in demand and beneficial for families attending evening and weekend programs at the Boston School Forest.

The first post-assessment questionnaire was comprised of ten questions (see Appendix E). The first post-assessment questionnaire asked adult participants to rate the day’s LNFI program; how often they initiate similar activities with their family; and, the likelihood that they will initiate more similar activities with their family on their own. These questions were asked using a Likert-type scale of 1 (very dissatisfied) to 5 (very satisfied), categorized responses of 1 (never) to 5 (10+ times), or categorized responses of 1 (never) to 4 (as often as we can find time), respectively. Following these questions there was space given for additional comments. Adult participants were also asked to rate the likelihood of their family attending the same BSF family program again, using a scale of 1 (very unlikely) to 5 (very likely). Given a list of the names of other LNFI programs, adult participants were asked to circle which additional LNFI program(s) they are interested in attending in the future. The first post-assessment also asked adult participants to rate their empathy for the outdoor environment on a scale of 1 (very low)
to 10 (very high), and then to choose whether or not that days’ LNFI program affected their interest in spending more time outdoors as a family (yes or no). Following these questions, there was space given for additional comments. Using a scale of 1 (no confidence) to 4 (very confident), adult participants were asked to rate their level of confidence in achieving the skills necessary to continue similar activities with their family outside of the BSF. Participants were also asked to rate the value they felt that days’ program brought to the surrounding community, on a scale of 1 (no value) to 4 (high value). The final question within the first post-assessment asked adult participants to provide any additional comments about their experience initiating outdoor activities with their families.

Demographic information collected on the first post-assessment included name, program title, date, number of adults, number of children (under 18 years of age), and zip code.

**Project Evaluation Tools: Second Post-Assessment Questionnaire**

The second post-assessment questionnaire was provided to adult participants in a self-addressed, stamped envelope at the end of their completion of the first post-assessment, and addressed subproblems II and III of this study (see Appendix F):

II. Determine whether or not the compilation of activities related to living in a sustainable manner, having low impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest are in demand and beneficial for families attending evening and weekend programs at the Boston School Forest.
III. Assess the influence of guided experiences in the development of environmental sensitivity on adult program participants.

The second post-assessment questionnaire was comprised of fourteen questions (see Appendix F), and adult participants were asked to complete it and mail it back to the BSF two weeks following the LNFI program. This questionnaire focused on measuring adult participants’ sustained interest and action in participating in outdoor activities as a family. Questions include, how influential was the LNFI program towards the adult participant’s continued interest in the topic? And has the adult participant initiated more similar activities with their family? This latter confidence is related to role modeling, one of the two important aspects of ES. This, in turn, can be measured as potential long-term gain in ES.

Within the second post-assessment questionnaire, adult participants were asked whether or not (yes or no) they had gained interest in similar outdoor family group activities. They were asked to rate how often they have initiated similar family group activities since the LNFI program, using a categorized response of 1 (never) to 5 (10+ times). They were also asked to rate how much they would like to initiate similar family group activities using a categorized response of 1 (never) to 3 (as often as we can find time). Following these questions there was space given for additional comments. Adult participants were also asked to rate the likelihood of their family attending each LNFI family program, using a Likert-type scale of 1 (very unlikely) to 5 (very likely), including the program(s) they attended. Using a scale of 1 (no confidence) to 4 (very confident), adult participants were asked to rate their level of confidence in achieving the skills necessary to continue similar activities with their family outside of the BSF (this question
was also used in the first post-assessment). Just like the pre-assessment and first post-assessment, adult participants were again asked to rate their empathy for the outdoor environment on a Likert-type scale of 1 (very low) to 10 (very high). And, just like the first post-assessment, adult participants were again asked to choose whether or not the LNFI program they attended had affected their interest in spending more time outdoors as a family (yes or no). Following these questions, there was space given for additional comments. There were then five questions that focused on the additional resources/equipment given to their family during their LNFI program. The first question asked whether or not (yes or no) the adult participant and their family had used the additional resources/equipment; next, it asked them to rate whether or not they had found the additional resources/equipment useful on a scale of 1 (not useful) to 4 (very useful). The following five questions asked whether or not the resources/equipment allowed them to initiate similar activities to those completed during the LNFI program with their family outside of BSF. At the end of these questions, there was space given for additional comments. Participants were also asked what they found most useful and least useful regarding the resources/equipment, and were asked to provide suggestions for improvement (all open-ended). Given a scale of 1 (no value) to 4 (high value), participants were asked to rate the overall value that the LNFI program brought to their family group. Finally, participants were asked to rate the value they felt that days’ program brought to the surrounding community, on a scale of 1 (no value) to 4 (high value).
Demographic information collected on the second post-assessment included name, program title, date attended, today’s date, number of adults, number of children (under 18 years of age), and zip code.

Approval of Assessment and Evaluation Materials

All adult participant assessments and the LNFI program consent form were developed originally by the researcher, and were approved by a validity panel of professors within the University of Wisconsin-Stevens Point College of Natural Resources (Dr. Brenda Lackey and Dr. Daniel Sivek) and College of Professional Studies (Dr. Paula DeHart). The graduate committee of Emily A. Hill, the researcher, approved all LNFI program evaluation materials used during this study.

The Institutional Review Board for the Protection of Human Subjects at the University of Wisconsin-Stevens Point reviewed all assessments and program evaluation materials for this study. Upon their acceptance, adult participant assessments and program evaluations began during the initial LNFI program, Leave No Trace Family Camp, in July 2007. Assessment data from the first four LNFI programs are included within this study.

Assessment Analysis

Each completed LNFI questionnaire was interpreted and responses were entered into a program-specific database by the researcher. Quantitative responses from each completed LNFI questionnaire were then compiled by assessment by the researcher. The researcher categorized all open-ended data by assessment; a second reviewer aided in the
naming of the categories to increase reliability. The following categories and related sub-
categories emerged based upon the adult participants’ open-ended responses. Examples
of respondents’ comments are included with each category and subcategory below (see
Figure 1 for overall distribution of the following three main categories):

1. Perceived Interest in Program
   a. Learn New Activity
      “X country skiing is new to us- trying something different.”
   b. Lack of Experience/Difficulty Initiating
      “I’m uncomfortable to take the kids camping by myself.”
   c. Accessibility/Convenience of Program
      “I like it when it is planned out for me- I’m a single parent and don’t have time
      for planning.”

2. Perceived Value in Program and Staff
   a. Well-run Program/Facilities
      “Great staff. Age appropriate. Great resource.”
   b. For Families
      “I think it’s wonderful to have a program such as this. It not only brings the
      ‘family’ closer together- but is very educational.”
   c. For the Community
      “This teaches all of us to work as a team and enjoy nature and each other.”

3. Program Influence
   a. Confidence
      “Involvement in a program like this motivates one to respect and enjoy the
      natural environment.”
   b. Materials
      “It expanded our understanding of winter time activities.”
   c. Activity Initiation
      “It was so much fun and gives me incentive to try and do more winter sports. I
      had always wanted to try cross-country skiing but it is difficult to coordinate if
      you don’t have skis- this made it so convenient and easy to manage. We REALLY
      appreciate it! And are considering trying to get some skis for ourselves!”

4. Other
Another way of interpreting the three main categories listed above is by what the adult participants reported (1) Before, (2) During, and (3) After each program, respectively (the “Other” category reveals the adult participants’ time spent outdoors, as discussed later in this chapter).

Data from the first four programs – *Leave No Trace Family Camp 2007, Geocaching and Questing for Families 2007, Cross-Country Skiing for Families 2008,* and *Family Snowshoe Adventure 2008* – have been combined in the presentation of the following results, unless indicated otherwise. Program-specific data are not discussed in this chapter, as it is more specifically relevant to the BSF staff in furthering their LNFI program development. Please see Appendices I, K, M, O for program-specific, assessment specific quantitative data, and Appendices J, L, N, P for program-specific, assessment specific qualitative data.
Summary

The three LNFI assessment questionnaires were used to determine the effectiveness of LNFI programs in relation to their influence on participating families’ interest in spending time outdoors. Additionally, the researcher and BSF staff used the questionnaire responses to determine the likelihood that families will have developed an active interest in continuing the outdoor activity in which they participated during the LNFI program(s). The second post-assessment helped the researcher and BSF staff observe how many families’ development of ES may have changed, as well as the families’ interest in spending more time in the outdoors with their family group. The overall adult participant responses to these three assessments will also guide the BSF staff in the continuation of future LNFI programs and similar community programs held at the BSF.
Chapter Four

RESULTS

Introduction

The purpose of this study is to examine the environmental education construct of environmental sensitivity by piloting and evaluating family-oriented, seasonal place-based outdoor recreation and educational programs at the Boston School Forest. The programs emphasize living in a sustainable manner, having low impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest.

The three subproblems of this study include:

I. Develop diverse family-oriented, place-based educational programs for year-round use at the Boston School Forest.

II. Determine whether or not the compilation of activities related to living in a sustainable manner, having low impact interaction with the natural environment, and learning about the cultural and natural history of the Boston School Forest are in demand and beneficial for families attending evening and weekend programs at the Boston School Forest.

III. Assess the influence of guided experiences in the development of environmental sensitivity on adult program participants.

Within the three subproblems of this study, the variables of environmental sensitivity analyzed include the influences of (1) time spent outdoors and (2) role models.
The development of the programs, and demand for and benefits of the programs were also analyzed. In other words, the researcher was interested in measuring the LNFI program participants’ outdoor experience outside of the BSF, the perceived value and quality of the LNFI programs, and the likelihood that the families in attendance at the LNFI programs may initiate more similar activities on their own in the future. This latter measure of personal confidence and initiation demonstrates a change in ES for LNFI program adult participants, and was incorporated into each questionnaire (see “Case Studies” section below), using Likert-type scales adapted from Sia (Sivek, 2002).

The two objectives of this study include:

I. To demonstrate the effects between exposures to environmentally sensitive role models on participants at the Boston School Forest and a higher confidence in initiating similar activities with their family outside of the Boston School Forest LNFI programs.

II. To identify if families attending the new Boston School Forest LNFI programs consider the distribution of related resources more useful than not useful.

Program Attendance and Assessment Summary

During the first LNFI program - Leave No Trace Family Camp 2007 - there were eight total family groups in attendance, and eight groups that participated in the assessment process. One group completed only the Pre-Assessment. Five groups completed both the Pre-Assessment and first Post-Assessment. Two groups completed all three assessments (Pre-Assessment, first Post-Assessment, and the second Post-Assessment).
During Geocaching and Questing for Families 2007, there were twelve total family groups in attendance, and twelve groups that participated in the assessment process. One group completed only the Pre-Assessment. Five groups completed both the Pre-Assessment and first Post-Assessment. Four groups completed all three assessments.

During Cross-Country Skiing for Families 2008, there were 58 total family groups in attendance, and 52 groups that participated in the assessment process. Eleven groups completed only the Pre-Assessment. Twenty-one groups completed both the Pre-Assessment and first Post-Assessment. One group completed only the first Post-Assessment. One group completed only the first Post-Assessment and the second Post-Assessment. Eighteen groups completed all three assessments.

During Family Snowshoe Adventure 2008, there were thirteen total family groups in attendance, and twelve groups that participated in the assessment process. Five groups completed only the Pre-Assessment. Three groups completed both the Pre-Assessment and first Post-Assessment. Two groups completed the Pre-Assessment and second Post-Assessment. Two groups completed all three assessments.

In summary, there were a total of 91 family groups in attendance across the four LNFI programs assessed in this study. There were 171 individual assessments completed, to include 80 Pre-Assessments completed, 62 first Post-Assessments completed, and 29 second Post-Assessments completed (see Figure 2). Eighty-two of the 91 family groups participated in the assessment process (response rate = 90.10 percent). Twenty-six of the 91 family groups completed all three assessments (response rate = 28.57 percent).
Subproblems One and Two:

Development of Programs, Demand for and Benefits of Programs

The first two subproblems of this study include the development of diverse family-oriented, seasonal place-based educational programs for year-round use at the Boston School Forest, and to determine whether or not the compilation of activities utilized during the programs are in demand and beneficial for families attending the programs. In order to address these interrelated subproblems, qualitative data obtained from all three assessments, across the four-abovementioned programs, provides the following information:

There are 189 coded qualitative remarks inclusive of the three emerged categories mentioned earlier (aside from Other). These remarks were gathered across the 171 individual Pre-Assessments, first Post-Assessments, and second Post-Assessments completed by the 82 family groups that participated in the assessment process.
Of these qualitative remarks, 42 of them (22 percent) fell into the “Perceived Interest in Program” category (remarks and sub-categories: 14 within “Learn New Activity,” 5 within “Lack of Experience /Difficulty Initiating,” and 23 within “Accessibility/Convenience of Program”).

Within the “Perceived Interest in Program” category (see Figure 3), the “Accessibility/Convenience of Program” sub-category accounted for 55 percent of its qualitative comments. The majority of the 23 remarks in this sub-category are positive, and similar to the following: “My wife and I like to cross country ski and this was a good opportunity to expose our kids and see if they like it before spending $$ on equipment for them.” The majority of adult participant interest in the program derived from the program’s accessibility and convenience (55 percent), followed by the adult participants’ desire to learn a new activity (33 percent), and finally because of the lack of experience/difficulty initiating that activity on their own (12 percent). The majority of the 14 remarks within the “Learn New Activity” and 5 remarks within “Lack of Experience /Difficulty Initiating” sub-categories are also positive, and similar to the following, respectively:

“With all our new ideas (and new backpack and supplies) we are anxious to use the information and techniques we have learned.”

“Winter activities always need a little help. Summer-no problem!”
Of the 189 total emerged qualitative remarks, 80 of them fell into the “Perceived Value in Program and Staff” category (remarks and sub-categories: 22 within “Well-run Program/ Facilities,” 38 within “For Families,” and 20 within “For the Community”) (See Figure 4).

Within the “Perceived Value in Program and Staff” category, the “For Families” sub-category accounted for the highest percentage (47), of qualitative comments. The majority of the 38 remarks provided by adult participants in this sub-category are positive. Examples of remarks in the “For Families” sub-category include: “I like the fact that the program teaches respect for nature, teaches valuable skills at an adult and child level and helps to bind our family closer,” and, “Stressing the importance of the environment and protecting it is a very important value to instill in our children. This is especially important for children who play inside all the time and don’t know how to enjoy the outdoors.” Most of the 22 remarks within the “Well-run Program/ Facilities”
and 20 remarks within the “For the Community” sub-categories are also positive. Such remarks include, respectively, “I think this was a really well run program. It was very organized and the staff was extremely helpful.” “Programs like this one enhance the quality of life in our community. This program teaches us to enjoy the natural environment of our area.” In other words, the highest demand and benefit of the programs was reported directly for families (47 percent); second, the well-run program/facilities (28 percent), and lastly, for the community (25 percent).

(Figure 4: “Perceived Value in Program and Staff” emerged category, n = 80 remarks)

Quantitative data from the first Post-Assessment and second Post-Assessment across the four programs support these qualitative trends. In the first Post-Assessment (n = 62), on a Likert-type scale of 1 (no value) to 4 (high value), 94 percent of respondents indicated that the program they attended brings “high value” to their surrounding community. In the second Post-Assessment (n = 29), this same question is
posed; 93 percent of respondents indicated “high value” once more. In relation to the
demand and benefit of the programs for families, 89 percent of respondents (n = 29) in
the second Post-Assessment indicated “high value” on a scale of 1 (no value) to 4 (high
value).

**Subproblem Three: Influence of Time Spent Outdoors, Role Models**

The third subproblem of this study focuses on the influence of guided experiences
in the development of environmental sensitivity (ES) on adult program participants.
Results that address this subproblem will be divided into two categories of qualitative
responses, each demonstrated as having vital influence in the development of ES (Sivek,
2002): time spent outdoors, and emerging role models.

In order to address this subproblem, qualitative data obtained from all three
assessments, across the four-abovementioned programs, provides the following
information:

There are 189 coded qualitative remarks inclusive of the three emerged categories
mentioned earlier (aside from Other). These remarks were gathered across the 171
individual Pre-Assessments, first Post-Assessments, and second Post-Assessments
completed by the 82 family groups that participated in the assessment process. Within a
fourth category, marked "Other," there are 202 remarks regarding non-program specific
ES questions, such as how much time the family spent outdoors prior to that LNFI
program.

In relation to time spent outdoors and the third subproblem of this study, most
adult participants indicate having had experience outside with their families. Such
remarks fall within the "Other" category, are found across all three assessments, and were categorized by the primary researcher as clearly stating how much time they spent outdoors as a family. Only nine remarks (4 percent of adult participants) indicate spending less than once a week outdoors with their family. Within the “Other” category, 59 remarks (29 percent of adult respondents) clearly state having spent more than twice a week outdoors.

This demonstrates a confounding variable within this study. Data for investigating the amount of time adult participants already spent outdoors with their family prior to attending the LNFI program are not clearly or fully answered. The conclusion that can be drawn for the time outdoors portion of the third subproblem, is that a greater percentage of 2007-2008 LNFI program adult participants initiated spending time with their family outdoors (i.e., at least twice a week), prior to attending the LNFI program.

Quantitative data from the first Post-Assessment and second Post-Assessment across the four programs support this trend. In the first Post-Assessment (n = 62), on a “yes, no” scale, 90 percent of respondents indicated that “yes,” the program they attended affected their interest in spending time outdoors as a family group. In the second Post-Assessment (n = 29), this same question is posed; 75 percent of respondents indicated, “yes” once more.

In the first Post-Assessment (n = 62), on a Likert-type scale of 1 (never) to 3 (“as often as we can find time”), 85 percent of respondents indicated the intent of “as often as we can find time” likelihood of how often they will initiate similar activities to that day’s LNFI program with their family in the future. In the second Post-Assessment (n = 29), that same question is posed with the prefix “since your participation.” Approximately 90
percent of respondents indicated the behavior of “as often as we can find time” response once more. And on the second Post-Assessment (n = 29), 44 percent of respondents initiated similar outdoor family activities a “few times”; 3 percent (one respondent) never initiated; 10 percent initiated once, 24 percent initiated 6-10 times; and, 14 percent initiated 10 + times. In other words, according to the second Post-Assessment (n = 29), 82 percent of all respondents initiated the behavior of similar activities to their respective LNFI program at least “a few times” since their participation in the program.

In relation to role models and the third subproblem of this study, the second-highest percentage of all sub-category remarks falls under the sub-category of “Activity Initiation,” within the category “Program Influence.” The “Activity Initiation” sub-category yields 29 remarks (15 percent of all categorized qualitative remarks), most of which are positive, and similar to the following, “Programs like this help get my family outdoors- organized events help us initiate further outdoor activities.” These remarks could be written on only the first Post-Assessment and second Post-Assessment, both of which followed the adults’ participation in each LNFI program. In addressing the importance of emerging role models and the development of ES, these data indicate a positive influence of BSF staff as role models for parents during the LNFI programs, and more specifically the program’s influence on the adult participants’ interest in and/or activity initiation with their family.

As addressed periodically in the first two chapters of this study, the future of environmentally literate citizens may fall more to parents as role models, role models being one of two leading factors influencing the development of ES (Sivek, 2002). As environmental education and environment-based education is reduced in schools, so is
the possibility of those schools’ teachers as environmentally literate role models. This study’s emerged “Activity Initiation” sub-category qualitative data and supportive quantitative data further emphasizes the important role LNFI family programs provide in the development of their participants’ ES, by providing outdoor time and role models for adults. This leads to another question, if whether LNFI program participation by teachers can potentially lead to an increase in their ES, thereby increasing the chance of their decision to utilize Environment-Based Education in schools (see Chapter 2). The results of this study support past ES research, and it is a possibility that the LNFI programs may potentially help strengthen environmentally literate citizenry both in homes and schools.

**Objective One: Self-Reported Environmental Sensitivity and Confidence**

The first objective of this study is to demonstrate the effects between exposures to environmentally sensitive role models on participants at the Boston School Forest and a higher confidence in initiating similar activities with their family outside of the Boston School Forest LNFI programs.

Qualitative data that emerged from adult participant responses to either or both the first Post-Assessment and second Post-Assessment indicate 20 remarks (10 percent of all categorized remarks) within the “Confidence” sub-category of the “Program Influence” category, most of which are positive. This percentage helps partially illuminate what percentage of adult participants self-report that they have gained confidence with the skills identified during the LNFI programs so that they can initiate the activities on their own with their families.
An example of a “Confidence” sub-category remark includes, “Each outdoor experience enhances our confidence- the friendly, helpful and very knowledgeable staff also provided wonderful support.”

Quantitative data reveal a clearer percentage of adult participants’ LNFI program-influenced confidence levels in achieving the skills necessary to continue leading similar outdoor family activities. A related Likert-type scale question is posed on the first Post-Assessment and second Post-Assessment. Out of the 91 adult participants answering these assessments, 16 respondents (17 percent) indicate that they are at least “somewhat confident,” and 71 respondents (78 percent) indicate that they are “very confident” in being able to achieve the skills necessary to continue leading similar activities to the LNFI program attended. These data indicate that LNFI program adult participants’ confidence levels in initiating similar activities were positively affected by the LNFI programs; this again supports the LNFI programs’ positive influence in the development of adult participants’ ES.

In relation to how the above confidence rates affected the adult participants’ action, the conclusion for Subproblem Three as mentioned earlier indicates the majority of adult participants (82 percent) have initiated similar activities to their respective LNFI program at least “a few times” since their participation in the program. It is hard to directly correlate the adult participants’ confidence rate and initiation rate, but in relation to the ES research (Sivek 2002), a higher confidence rate and higher ES tends to lead to higher initiation of activities. In this study, both the post-program confidence rate and post-program initiation rates of adult participants are high. Therefore, the adult
participants’ experience in the LNFI programs positively influenced both their confidence level in initiating similar activities, and their potential in initiating those activities.

**Objective One: Self-Reported Environmental Sensitivity “Case Studies”**

To more clearly determine the influence of the LNFI program on adult participants’ development of confidence and ES, the researcher recorded quantitative data across all four programs for the adult participants \((n = 26)\) who completed all three assessments. On each assessment, adult participants were asked on a Likert-type scale of 1 (very low) to 10 (very high), how they would rate their current empathy for the outdoor environment. This self-reported measure of ES is adapted from Archibald Sia (Sivek, 2002). Fourteen of the 26 respondents indicated the same level of self-reported ES across all three assessments. One respondent (6 percent) maintained a response of “7” across all three assessments; three respondents (22 percent) maintained a response of “8” across all three assessments; three respondents (22 percent) maintained a response of “9” across all three assessments; and, seven respondents (50 percent) maintained a response of “10” across all three assessments (see Figure 5).
The remaining twelve respondents indicated ten separate increases in self-rating across the assessments, and five separate decreases in self-rating across the assessments. Between the Pre-Assessment and first Post-Assessment, three respondents indicated a one-point increase in empathy, one respondent indicated a two-point increase in empathy, and one respondent indicated a one-point decrease in empathy. Of the four respondents that indicated an increase between the Pre-Assessment and first Post-Assessment, they indicated a decrease between the first Post-Assessment and second Post-Assessment by the same increment.

Between the first Post-Assessment and second Post-Assessment, two respondents indicated a half-point increase, three respondents indicated a one-point increase, and one respondent indicated a two-point increase. None of these same participants indicated a decrease across the three assessments.
In summarizing the “case study” data, 53 percent of respondents (14 individuals) maintained their ES levels, and 23 percent of respondents (6 individuals) increased their self-reported ES level after having participated in the LNFI program. The remaining 6 individuals demonstrated differing responses across their three self-reported measures of ES.

**Objective Two: Usefulness of Program Materials**

The second objective of this study is to identify if families attending the new Boston School Forest LNFI programs consider the distribution of related resources more useful than not useful.

In order to examine this objective, three quantitative questions on the second Post-Assessment were utilized, along with the qualitative emerged sub-category “Materials” within “Program Influence.” Eighteen remarks were made within the sub-category “Materials,” 27 percent of the remarks within the “Program Influence” category, or 9 percent of all qualitative remarks. Utilizing these qualitative data alone does not provide enough information with regard to the usefulness of materials distributed to LNFI program families. Twelve of these remarks were included within the second Post-Assessment; all 18 remarks indicated a mainly positive effect between the materials distributed to the families both during and to take home after each LNFI program, and are similar to the following, “I am definitely interested in more information on activities like this,” and, “We learned the first time about GPS orientation. We might use this if we go hiking in North Wisconsin.” In the second Post-Assessment (n = 29), there are three Likert-type scale questions that addressed the usefulness of LNFI program materials. The
first question asks whether or not adult participants have used the resources/equipment; 63 percent indicated “yes,” and 26 percent indicated “no.” The second question asks whether or not the adult participants consider the resources/equipment useful in their family group; 69 percent indicated “yes,” 23 percent indicated “somewhat useful,” two individuals indicated “neutral,” and no participant indicated “no.” The final question regarding resources/equipment asks participants if they help to allow them to initiate new outdoor activities with their family group; 69 percent indicated “yes,” 19 percent indicated “no,” and three individuals were unsure.

In relation to objective two, materials distributed to families during the LNFI programs are found to be more useful than not useful.

Data Summary

Subproblems 1 and 2:

Within the emerged “Perceived Interest in Program” category, over half of the qualitative remarks by adult participants support accomplishment of the first subproblem of this study. Within the “Perceived Value in Program and Staff” category, the “For Families” sub-category percentages help to more clearly emphasize the target audience’s demand for and related benefit of the LNFI programs.

The highest demand and benefit of the programs was reported directly for families (47 percent); second, the well-run program/facilities (28 percent), and lastly, for the community (25 percent).
Subproblem 3:
(Time Spent Outdoors)

The conclusion that can be drawn for the ‘time spent outdoors’ portion of the third subproblem, is that a greater percentage of LNFI program adult participants initiate spending time at least twice a week with their family outdoors, prior to attending the LNFI program.

(Role Models)

The second-highest percentage of all emerged sub-category remarks falls under the sub-category of “Activity Initiation,” yielding 29 remarks (15 percent of all categorized qualitative remarks). These remarks could be written on only the first Post-Assessment and second Post-Assessment, both of which followed the adults’ participation in each LNFI program.

This data indicates a positive influence of BSF staff as role models for parents during the LNFI programs, and more specifically the program’s influence on the adult participants’ interest in and/or “Activity Initiation” with their family.

Objective 1

Data that emerged from adult participants answering either or both the first Post-Assessment and second Post-Assessment indicate 20 remarks (10 percent of all categorized remarks) within the “Confidence” sub-category of the “Program Influence” category.

A related Likert-type scale question is posed on the first Post-Assessment and second Post-Assessment. Out of the 91 adult participants answering these assessments, 16 respondents (17 percent) indicate that they are at least “somewhat confident,” and 71
respondents (78 percent) indicate that they are “very confident” in being able to achieve the skills necessary to continue leading similar activities to the LNFI program attended. (“Case Studies”, N = 26 individuals)

In summarizing the “case study” data, 53 percent of respondents (14 individuals) maintained their ES levels, and 23 percent of respondents (6 individuals) increased their self-reported ES level after having participated in the LNFI program. The remaining 6 individuals demonstrated differing responses across their three self-reported measures of ES.

Together, this indicates that LNFI program adult participants’ confidence levels in initiating similar activities were positively affected by the LNFI programs.

Objective 2

Eighteen remarks were made within the emerged sub-category “Materials,” 9 percent of all qualitative remarks. All 18 remarks indicated a beneficial relationship between the materials distributed to the families both during and to take home after each LNFI program.

In the second Post-Assessment (n = 29), there are two Likert-type scale questions that directly addressed the usefulness of LNFI program materials. First, 62 percent indicated “yes,” and 25 percent indicated “no” in relation to their use of the resources/equipment. Second, 69 percent indicated “yes,” 23 percent indicated “somewhat useful,” and two individuals indicated “neutral” in relation to how useful the resources/equipment are in their family group.

The materials distributed to families during the LNFI programs are found to be more useful than not useful.
Chapter Five

DISCUSSION

Revisiting Justifications

2006 BSF Survey

In April 2006, the Boston School Forest (BSF) surveyed parents, teachers and principals from the Stevens Point Area Public Schools. Many parents expressed a desire to attend family-oriented programs similar to those their children routinely experience at the BSF. Parent comments indicate a common interest in spending greater time with their family in the outdoors, including at the BSF.

Throughout the data gathered across the four LNFI programs and three assessments, as indicated above, families highly appreciated the opportunity to spend time with their family in the outdoors, including at the BSF.

Goal ofReducing Nature- Deficit Disorder

In order to reduce the effects of nature- deficit disorder (Louv, 2005), the Leave No Families Inside (LNFI) project seeks to promote a healthier community by guiding parents and children in outdoor activities. The LNFI project increased time that family participants in the program spend together outdoors. In doing so, LNFI has the potential to increase the confidence of parents in being outdoor role models for their children, and
has the potential to foster an increased environmental sensitivity (ES) for the families involved.

Throughout the data gathered across the four LNFI programs and three assessments, adult participants (parents) indicate an increased confidence in being outdoor role models for their children. This study has also indicated an increase in adult participant confidence in initiating similar outdoor activities for their family group on their own, a variable associated with increased ES.

In relation to a measurement of LNFI program influence on community health, data from the first two subproblems indicates the strongest emerged sub-category of all qualitative data to be “For Families” (within the “Perceived Value in Program and Staff” category), at 20 percent of all emerged remarks data. The “Perceived Value in Program and Staff” category holds the highest number of remarks of the three main categories at 42 percent. The next strongest category is “Program Influence,” at 35 percent; and lastly, “Perceived Interest in Program” at 22 percent (see Figure 1). The qualitative data obtained from the three emerged categories (n =189) reflect that the adult participants recognized and took the time to indicate the importance of the program, staff, and later influences of their experience having attended the program in relation to both their family and for their greater community.

**LNFI Program Impact and Environmental Sensitivity Development**

The data obtained from this study strongly support past research indicating role models and time outdoors as influential variables in the development of environmental sensitivity (Sivek, 2002). These two variables were consistent throughout the
implementation of all four assessed LNFI programs, and were investigated as part of each assessment.

Data obtained from the 2007-2008 LNFI program assessments supports the creation and implementation of the programs as beneficial and in demand for families in the Boston School Forest community (in part due to the programs’ accessibility and convenience, geographically and economically). Program materials used during and taken home by adult participants following the LNFI programs are found to be more useful than not useful. The majority of adult participants in LNFI programs already spend time with their family (more than twice a week) outdoors. Nonetheless, this study’s data indicate a positive influence of BSF staff as role models for parents during the LNFI programs, and more specifically the program’s influence on the adult participants’ interest in and/or activity initiation with their family for similar activities on their own. LNFI program adult participants’ confidence levels in initiating similar activities were positively affected by the LNFI programs; this again supports the LNFI programs’ positive influence in the development of adult participants’ ES.

The results from this study point to the importance for continuation of similar family-oriented, seasonal place-based outdoor recreation and educational programs. As indicated, within the short time-frame allowed during this study’s one sample of adult participants, trends in confidence levels and self-reported levels of raised ES following the LNFI program participation lead to adult participants’ further development of ES and confidence in leading their family in similar outdoor activities. These adult participants in effect become role models for their children; the level of environmentally literate citizens is impacted through family programs such as the LNFI programs.
Joining the Movement

Impacts of programs such as LNFI on the greater community are only beginning to be more thoroughly understood, in relation to both their participants’ development of ES, and the health of the community as a whole. The LNFI programs were presented at the Midwest Environmental Education Conference in October 2007. An audience of nearly 100 educators attended, the majority of which signed up to receive the attached CD-ROM version of the LNFI Guidebook. Over half of the participants at the 2008 Wisconsin State Park System Interpretation Workshop signed up to receive the LNFI Guidebook, as well. This Guidebook will serve as a template for further family-oriented, seasonal place-based outdoor recreation and educational program and assessment development. Through these audiences alone, it can be accessed and utilized by district coordinators, teachers, and community organizations alike.

With a more thorough understanding of LNFI program adult participants’ background of time spent outdoors, and future additions of assessment data to that which is presented here, we can continue to obtain a growing understanding of the importance of outdoor family programming as it relates to ES and community vitality as a whole. The future of our environmentally literate citizenry rests more on the shoulders of parents if schools decrease implementation of environmental education standards and environment-based education methods.

According to Halcomb (1985), “The family unit has the greatest influence on an employee’s lifestyle and lifestyle changes.” Programs such as LNFI reflect not only an opportunity for families to spend time together and outdoors, but promote a healthy lifestyle within a community, similar to that outlined by the EarthWonders, LLC.
“Integrated Approach Stewardship Cycle” (Butcher & Dreier, 2008). EarthWonders was founded by Dreier in 2005, and has since then guided professionals across a wide variety of fields to utilize a healthy integrated personal, familial, and workplace lifestyle focused around an environmental mindset.

Since the initiation of the LNFI project, Louv has published an updated and expanded 2008 version of Last Child in the Woods, Saving Our Children from Nature-Deficit Disorder. Following the main text, he includes a new “Notes from the Field” section, in which he introduces how the movement to reconnect children with nature has spurred a variety of nationwide trends and policies. Family-wise, the National Audubon Society is currently campaigning to create a family-focused nature center in every congressional district in the U.S. (p. 352), which is later supported by Louv’s statement, “Such organizations are recognizing that the human child in nature may well be the most important indicator species of future sustainability (p. 353).” Before listing his “100 Actions We Can Take”, beginning with “Nature Activities for Kids and Families,” Louv asserts that the main fuel behind the developing movement to reconnect children with nature must include parents and family members:

“Beyond all of this, the most important development has been the growing number of individual parents and other family members who have decided to do what it takes to bring nature into their lives, and keep it there. The real measure of our success will not be in the number of programs created or bills passed, but in the breadth of cultural change that will make such decisions second nature- in every family, every school, and every neighborhood (p.356).”

Within “Nature Activities for Kids and Families,” similar activities to those utilized during LNFI programs are mirrored. The concept of using nature as a partner to strengthen family bonds is suggested; 2007-2008 LNFI parent participants mentioned this multiple times. It is difficult to quantify the effects of such a bond, but an effect of the
LNFI programs on participant families’ mindsets was evident, and such a mindset benefits not only the children of those families, but the parents, family unit, and environment in which we all reside. 2007-2008 LNFI parent remarks include:

“We like to be active and outdoors. It is an added bonus to spend time together learning some new physical activity.”

“I have always enjoyed outdoor activities. This just reinforces the fact that the whole family can enjoy them.”

“Making family friendly outdoor activities available increases the communities’ awareness of outdoor resources and issues.”

“Programs like this one enhance the quality of life in our community. This program teaches us to enjoy the natural environment of our area.”

As dictated above, the LNFI programs are part of a nation-wide growing movement to reconnect with nature, one that also includes “…as of spring 2008… state and national legislatures, conservation groups, schools and businesses, government agencies and civic organizations,” (Louv, p. 351) that encourage the interaction of children and families within nature. The National Park Service and National Association of State Park Directors co-signed a “Children and Nature Plan of Action” in 2006, and in 2007, the U.S. Forest Service began “More Kids in the Woods,” which focuses on local funding to bring more children into the outdoors (Louv, p. 351).

In June of 2008, the LNFI researcher and BSF Director presented the LNFI programs, Guidebook, and LNFI 2007-2008 assessment results and recommendations during the 2008 Wisconsin State Park System Interpretation Workshop. Interest in local outdoor family programming in the U.S. State Park System is also growing, perhaps in response to the supposed decline in outdoor recreation attendance as outlined by Pergams & Zaradic (2008).
Between 2007-2008, the LNFI programs reached nearly 500 family participants, and 150 conference participants. In July of 2008, the Boston School Forest will hold a second *Leave No Trace Family Camp*. After that point, the LNFI programs at the BSF will be maintained to what capacity is available through funding and staff.

Following the binding of this document, a new version of the LNFI Guidebook will be designed and distributed to the University of Wisconsin-Stevens Point Department of Education. It will be used during teacher training projects and other appropriate education classes, and potentially made available to teachers during Wisconsin Education Association Council Conferences. Both versions of the LNFI Guidebook will continue to be transferred to environmental educators by the researcher, BSF Director, and UW-SP College of Natural Resources and LEAF web sites to Wisconsin School Forests, Parks, and Nature Centers. The researcher will distribute 125 of the original LNFI Guidebooks (see attached CD-ROM) electronically to the 2007 MEEC and 2008 Wisconsin State Park System Interpretation Workshop participants.

In October 2008, the researcher and BSF Director will again present the LNFI project, study and have CD-ROM versions of both LNFI Guidebooks available during the North American Association for Environmental Education Conference. Through continued and varied veins of distribution, the LNFI programs and importance of family programming and adult ES research will be transferred to a wide audience. At present, Mosquito Hill Nature Center near New London, WI, has incorporated a version of the LNFI programs into its annual offerings for the public. It is reassuring to know that the LNFI programs have and will continue to contribute to the growing “children and nature movement,” as well as emphasize the growing importance of the *family* in nature.
REFERENCES

Literature Cited


APPENDIX A

WEEB Grant: Objectives, Activities Timeline, Activities Description, and Resources for Family Participants, Evaluation Dissemination, and Activities Continuation

The following text is taken from a Wisconsin Environmental Education Board Grant entitled; *Leave No Family Inside, Bringing Families Together in the Outdoors* (LNFI), written by Karen Dostal and Emily A. Hill, submitted on 1/12/07 and includes this project. It further outlines the proposed 2007-2008 calendar year of LNFI family-oriented programs at the BSF, emphasizing the future importance of this study.

“Richard Louv, author of *Last Child in the Woods, Saving our Children from Nature- Deficit Disorder* says, ‘Healing the broken bond between our young and nature is in our self-interest, not only because aesthetics or justice demand it, but also because our mental, physical, and spiritual health depend upon it (p. 3).’ Through this project the BSF hopes to help create a healthier community by guiding parents and children in outdoor activities.

- **Objective 1:** To introduce families to outdoor recreational and educational activities that they can do together throughout the seasons.

- **Objective 2:** To give families a chance to spend more time together at BSF.

- **Objective 3:** To encourage families to participate in aerobic activities in the outdoors as a means of improving their overall wellness.

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<td>Events</td>
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<td>a. Leave No Trace Family Camp</td>
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<td>b. Questing and Geocaching Event</td>
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<td>c. Cross-Country Ski Tour</td>
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<td>d. Family Snowshoe Night</td>
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<td>e. Earth Day Celebration</td>
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</table>

- **Objective 4:** To provide families with the skills and awareness needed to be successful in these outdoor activities.
Leave No Trace Family Camp: Families will learn to set up tents, use a camp stove, cook over an open fire, purify water, and prepare dehydrated food as well as other general camping skills. They will also be instructed in the ethics of Leave No Trace outdoor skills. They will stay overnight in tents at the BSF. Food for two meals that each family will prepare and serve potluck style will be provided at the camp. During meals BSF leaders will discuss where families can hike and camp in the area. Maps, brochures and other contact information to area campgrounds will be provided. A few camp supplies will be distributed to families at the end of the camp.

Questing and Geocaching: Families will learn the processes of both of these relatively new outdoor activities. Volunteer high school students will research the natural and cultural history of the BSF under the guidance of the project consultant and the project director. They will then write a Quest (a scavenger hunt written in verse that includes history and clues as to how to find the next quest point). Families participating in the LNFI Questing and Geocaching event will be able to independently follow the Questing course and learn about the natural and cultural history of the BSF. Participants will also be instructed in how to use a GPS unit and how to find hidden caches at the school forest using a GPS unit. Information and a free compass will be provided to participants so they can continue questing and geocaching on their own in the larger community.

Cross-Country Ski Tour: This will be a daylong event where families can drop in at the BSF and stay as long as they like. They will be instructed as to how to use ski equipment and a guide will take them out to the trails at the BSF. Participants can come back to the lodge for hot chocolate and learn about where they can obtain ski equipment to rent or buy and where they can go to ski locally.

Family Snowshoe Night: Families will come to the school forest between 6:30 and 8:30 p.m. on three different nights around the full moon in February 2008. BSF leaders will demonstrate the fundamentals of snowshoeing. During the event participants will be given a guided night hike along trails lit by luminaries. BSF guides will teach about nocturnal animals, night vision and other topics related to the night. The event will also include snowshoe games to get the participants laughing and moving. Snowshoe games include relay races, snowshoe kickball and volleyball. The end of the event will include hot chocolate and cookies back in the lodge. Information on snowshoeing as a sport and information on where to rent or purchase snowshoes to continue the sport will be distributed to families at this time.

Earth Day Celebration: The Earth Day Celebration program will be held on an afternoon nearest Earth Day. This may include birdwatching, Earth Games, conservation activities such as tree planting, building birdhouses, and tree identification, as well as activities related to Education for Sustainability. These may include calculating each family’s ecological footprint, learning to live with sustainability as a goal, native plantings and organic gardening. Books and materials on parent & child activities to share in the outdoors will be distributed.

Prior to each of the events the Project Consultant will meet with the Project Coordinator and the BSF staff to train those involved in the guiding process. The BSF staff will work with the Project Consultant to prepare materials, and work out the details for each event. The Project Consultant will develop the pre and post-event surveys and compile the results. The Project Coordinator will be responsible for purchasing materials, obtaining donated materials, advertising and coordinating the particulars of each event.

- **Objective 5**: To provide resources and information for participants to continue their interest in and pursuit of the outdoor activities in the local area.

Support materials will be provided for families attending LNFI events in order to encourage their continued interest in the outdoor recreation activities they experienced at the BSF. Following each of the LNFI events, families will take with them resource books, brochures, maps or equipment that will enable them to independently pursue time outdoors as a family. The Project Consultant and the Project Coordinator will research, create and purchase resource materials to provide to family participants. They will explain how to utilize these materials during each LNFI event.
Resources [Provided for Family Participants]

a) Leave No Trace Family Camp: Backpack filled with maps and contact information for local campgrounds, water bottle, Frisbee, whistle, leave no trace ethics brochure, trowel, biodegradable soap, sun block.
b) Questing and Geocaching Event: Information on creating quests and geocaches, websites on local geocaches and quests, an orienteering compass.
c) Cross-Country Ski tour: Maps, brochures and contact information on local ski areas. Information on where to rent or buy skis will be available.
d) Family Snowshoe Night: Information on where to snowshoe and where to rent or purchase snowshoes. A free copy of Silent Sports Magazine may be provided.
e) Earth Day Celebration: Information on sustainable lifestyles, i.e. recycling, resource use, composting, organic local foods and other printed media available through the EPA, Wisconsin DNR and Stevens Point Area sources will be provided. Information on Citizen Science opportunities, a copy of Dr. Joe Passineau’s book Teaching Kids to Love the Earth, an inflatable Earth ball, a compact fluorescent light bulb and a tree seedling will also be included and packed into a canvas shopping bag.

Dissemination

The Project Consultant and the Project Coordinator will prepare a guidebook for use by school forests and nature centers. The guidebook will include activities and methodology for working with and guiding families toward a more active lifestyle in the outdoors. The activities outlined in this grant proposal will be included in the guide. Additional activities will also be included in the guide so that new outdoor activities can be offered to families during future LNFI events at the BSF. The LNFI project will be presented at the Wisconsin Environmental Education Convention in October 2008. The LNFI guidebook will be available to workshop participants and to others as requested. An overview of the project will be submitted to Jeremy Solin to be included on the statewide school forest portion of the LEAF website. Acknowledgement of the WEEB funding for this project will be included in the guidebook as well as on the BSF website.

Continuation

The BSF staff already has interest in and dedication to providing more outdoor activities for families in the Stevens Point Area community. Following the LNFI project funding the BSF staff will utilize the results of the parent surveys completed during the project to determine which of these family-based activities best held the interest of participants. The BSF staff will have developed expertise and experience in working with families. They will also have increased their comfort level with the activities developed in the LNFI guide book and will be able to reuse the activities outlined in this project as well as offer new activities for family programs in the future. Not only will the BSF continue with family activities yearly but also the families themselves will have developed skills and interest in continuing outdoor activities with their children. This project will spark awareness for parents in the importance of spending time outdoors in recreational and environmental pursuits as a family (Dostal & Hill, 2007)."
APPENDIX B

Portage County Community Foundation Grant

(Selections from) 2007 Grant Application Form

Title: Leave No Family Inside: Bringing Family Programs to the Boston School Forest

This project will involve the Portage County community in outdoor recreation and environmental education activities at the Boston School Forest. In April of 2006 the Boston School Forest (BSF) surveyed parents, teachers and principals from the Stevens Point Area Public Schools. Parents who shared written comments about the school forest in the survey expressed the desire to attend family-oriented programs in addition to the school programs currently provided by the BSF. Parents would like to participate in guided activities so that they can try new outdoor recreation activities and learn along with their children. (Please see the BSF website for the complete survey results.)

Goal: To counter effects of child nature-deficit disorder in our community.

Richard Louv, author of Last Child in the Woods, Saving our Children from Nature-Deficit Disorder says, “Healing the broken bond between our young and nature is in our self-interest, not only because aesthetics or justice demand it, but also because our mental, physical, and spiritual health depend upon it.” Through this project the BSF hopes to help create a healthier community by guiding parents and children in outdoor activities.

The school forest is an important community resource where Placed-based Education occurs. Through the school programming the BSF has met with success in getting adults and children to develop interest in spending time together in the outdoors. The BSF has held an annual Family Snowshoe event in February since 2002.

Target audiences:

• Approximately 300-500 community members, children and families participating in outdoor recreation and environmental education events.

• **Objective 1**: To introduce families to outdoor recreational and educational activities that they can do together throughout the seasons.

• **Objective 2**: To give families a chance to spend more time together at the Boston School Forest.

• **Objective 3**: To encourage families to participate in aerobic activities in the outdoors as a means of improving their overall wellness.
**ACTIVITIES AND TIMELINE FOR OBJECTIVES 1,2,3**

<table>
<thead>
<tr>
<th>Events</th>
<th>Who Guides</th>
<th>Who Benefits</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Leave No Trace Family Camp</td>
<td>Project Consultant and 2 BSF staff members</td>
<td>Approximately 10-12 families</td>
<td>July of 2007</td>
</tr>
<tr>
<td>b. Questing and Geocaching Event</td>
<td>Project Consultant and 2 BSF staff members</td>
<td>Approximately 20 families</td>
<td>Mid-September 2007</td>
</tr>
<tr>
<td>c. Cross-Country Ski Tour</td>
<td>Project Consultant and 4 BSF Staff members</td>
<td>Approximately 50 families</td>
<td>Mid-Jan. 2008</td>
</tr>
<tr>
<td>d. Family Snowshoe Night</td>
<td>Project Consultant and 2 BSF Staff members</td>
<td>Approximately 40 – 50 families</td>
<td>Near Full moon Feb. 2008 2-3 nights</td>
</tr>
<tr>
<td>e. Earth Day Celebration</td>
<td>Project Consultant and 2 BSF Staff members</td>
<td>Approximately 40 – 50 families</td>
<td>Earth Week 2008</td>
</tr>
</tbody>
</table>

- **Objective 4:** To provide families with the skills and awareness needed to be successful in these outdoor activities.
  
  a. **Leave No Trace Family Camp:** Families will learn to set up tents, use a camp stove, cook over an open fire, purify water, prepare dehydrated food as well as other general camping skills. They will also be instructed in the ethics of Leave No Trace outdoor skills. They will stay overnight in tents at the school forest. Food for 2 meals that each family will prepare and serve potluck style will be provided at the camp. During meals BSF leaders will discuss where families can hike and camp in the area. Maps, brochures and other contact information to area campgrounds will be provided. A few camp supplies will be distributed to families at the end of the camp.

  b. **Questing and Geocaching:** Families will learn the processes of both of these relatively new outdoor activities. Volunteer high school students will research the human and natural history of the school forest under the guidance of the BSF staff. They will then write a Quest (a scavenger hunt written in verse that includes history and clues as to how to find the next quest point). Families participating in the LNFI Questing and Geocaching event will be able to independently follow the Questing course and learn about the natural and cultural history of the school forest. Participants will also be instructed in how to use a GPS unit and how to find hidden caches at the school forest using a GPS unit. Information and a free compass will be provided to participants so they can continue questing and geocaching on their own in the larger community.

  c. **Cross-Country Ski Tour:** This will be a daylong event where families can drop in at the school forest and stay as long as they like. They will be instructed as to how to use ski equipment and a guide will take them out to the trails at the BSF. Participants can come back to the lodge for hot chocolate and learn about where they can obtain ski equipment to rent or buy and where they can go to ski locally.

  d. **Family Snowshoe Night:** Families will come to the school forest between 6:30 and 8:30 p.m. on 3 different nights around the full moon in February. BSF leaders will demonstrate the fundamentals of snowshoeing. During the event participants will be given a guided night hike along trails lit by luminaries. BSF guides will teach about nocturnal animals, night vision and other topics related to the night. The event will also include snowshoe games to get the participants laughing and moving. Snowshoe games include relay races, snowshoe kickball
and volleyball. The end of the event will include hot chocolate and cookies back in the lodge. Information on snowshoeing as a sport and information on where to purchase snowshoes to continue the sport will be distributed to families at this time.

e. Earth Day Celebration: The Earth Day Celebration program will be held on an afternoon nearest Earth Day. This will be an event that may include bird watching, Earth Games, conservation activities such as tree planting, building bird houses, and tree identification, as well as activities related to Education for Sustainability. These may include calculating each family’s ecological footprint, learning to live with sustainability as a goal, native plantings and organic gardening. Books and materials on parent & child activities to share in the outdoors will be distributed.

- **Objective 5:** To provide resources and information for participants to continue their interest in and pursuit of the outdoor activities in the local area.

Support materials will be provided for families attending LNFI events in order to encourage their continued interest in the outdoor recreation activities they experienced at the BSF. Following each of the LNFI events, families will take with them resource books, brochures, maps or equipment that will enable them to independently pursue time outdoors as a family. The BSF staff will research, create and purchase resource materials to provide to family participants. They will explain how to utilize these materials during each LNFI event.

Example Resources:

f) Leave No Trace Family Camp: Backpack filled with maps and contact information for local campgrounds, water bottle, Frisbee, whistle, leave no trace ethics brochure, trowel, biodegradable soap, sun block.

g) Questing and Geocaching Event: Information on creating quests and geocaches, websites on local geocaches and quests, an orienteering compass.

h) Cross-Country Ski Tour: Maps, brochures and contact information on local ski areas. Information on where to rent or buy skis will be available.

i) Family Snowshoe Night: Information on where to snowshoe and where to rent or purchase snowshoes. A free copy of Silent Sports Magazine may be provided.

j) Earth Day Celebration: Information on sustainable lifestyles, i.e. recycling, resource use, composting, organic local foods and other printed media available through EPA, Wisconsin DNR and local sources will be provided. Information on Citizen Science opportunities, an inflatable Earth ball, a compact fluorescent light bulb and a tree seedling will also be included and packed into a canvas shopping bag.

Project Evaluation: At the conclusion of each LNFI event parents and children will complete a different evaluation survey specific to the event. The concluding surveys will be used by the BSF staff to determine the effectiveness of each LNFI event. Additionally, the BSF staff will use the surveys to determine the likelihood that families will have developed an active interest in continuing the outdoor activity in which they participated. The concluding evaluation survey will also help the BSF staff to see how many families develop environmental sensitivity and an interest in spending more time in the outdoors for the overall wellness of their family. These findings will guide the BSF staff in the continuation of future LNFI community events.
APPENDIX C

MEEC Concurrent Session Abstract

Midwest Environmental Education Conference 2007
Country Springs Hotel, 10/19/07
Stevens Point, WI

Karen Dostal
Boston School Forest Director; Stevens Point Area Schools Environmental Education Coordinator

Emily Hill
Leave No Family Inside Project Consultant; UW-Stevens Point Graduate Student

Leave No Family Inside:
Impact of Boston School Forest Family Programs on Variables of Environmental Sensitivity

Within the field of Environmental Education (EE), the development of Environmental Sensitivity (ES) can be thought of as a developed empathy for the outdoor environment. Past research consistently suggests that the development of ES is vital to the development of environmental interest and action. Sivek (2002) indicates two key factors in the development of ES: time spent outdoors over an extended period of time, and role models. Caduto (1983) asserts that experiential learning is an effective approach in achieving environmental values, including ES. This effectiveness multiplies with greater time spent outdoors as a family, and over an extended period of time. Confidence in initiating outdoor activities - with parents as role models - comes with the knowledge and resources available through an initial source.

In April 2006, the Boston School Forest (BSF) in Plover, Wisconsin surveyed parents, teachers and principals from the Stevens Point Area Public Schools. Many parents expressed a desire to attend family-oriented programs similar to those their children routinely experience at the BSF. In order to counter effects of nature-deficit disorder, the Leave No Family Inside (LNFI) project hopes to help create a healthier community by guiding parents and children in outdoor activities.

The LNFI project includes the piloting and evaluation of a series of new family-oriented place-based educational programs at the BSF throughout 2007-2008. These programs are free and open to the community. Grants awarded by the Wisconsin Environmental Education Board and the Community Foundation of Portage County provide the tuition and funds for additional resources given to LNFI program families. These grants also provide the salary for the BSF staff who lead the LNFI programs.

LNFI program themes include sustainability education and environmentally based low-impact activities. Individual LNFI programs include Leave No Trace Family Camp; Questing and Geocaching; Cross-Country Ski Tour; an expansion of the current Family Snowshoe Adventure; and Earth Day Celebration. Following each of the LNFI programs, families will take with them informational resources and additional equipment that will enable them to independently pursue time outdoors as a family.

All LNFI program participant family groups are asked to complete a consent form. Those adults that choose to complete a pre and post-assessment written questionnaire on site during the day of their LNFI program will be asked to complete a second post-assessment written questionnaire two weeks following their LNFI program (this second post-assessment is provided for them in a self-addressed and stamped envelope at the LNFI program). The three assessments are comprised of open and close-ended questions, as well as feature Likert-type scales, and focus on measures of ES: time spent outdoors as a family group; the adults’ confidence initiating similar outdoor activities with their family group; and continued interest in the LNFI program activities. The second post-assessment evaluates the additional resources and equipment given to the family group, as well. Each assessment also measures the family groups’ satisfaction with past and present BSF programs.

All assessment data collected during the LNFI project will be included within a Guidebook. This Guidebook will also contain LNFI program descriptions, all materials used during the preparation of each LNFI program (including materials already present at the BSF), media coverage of the LNFI programs, and an overall resource bibliography. This Guidebook may be evaluated by other Wisconsin School Forests, and will be made available for use in outdoor family program development.
APPENDIX D

2007-2008 LNFI Program Assessment Pre-Assessment Questionnaire

Pre-Assessment

Name: _________________________________  
Program Title: ___________________________  
Date: __________________________________

Thank you for taking the time to complete this brief questionnaire. In order to gain an understanding of your family group, please involve your child/children’s input where you see fit.

1. Has your child/children attended a Boston School Forest (BSF) program before today?

   Please circle ONE of the following:  
   No  Yes

2. Has your family group attended a BSF program before today?

   Please circle ONE of the following:  
   No  Yes

3. If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.

(Please Turn Over)
4. Please rate your current interest for each of the following new BSF family programs. *Circle one number for each program category.*

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

5. How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Very Low</th>
<th>Neutral</th>
<th>Very High</th>
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<tbody>
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<td>3</td>
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</table>

6. Which family group member(s) influenced your decision to participate in today’s BSF family program?

7. On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?
8. Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

Please provide the following information about your family group in attendance today:

Number of Adults: ____________________________
Number of Children (under 18 years of age): ____________
Zip Code: ____________________________________

Thank you for your time. Your input is highly appreciated. We hope you enjoy the program!
APPENDIX E

2007-2008 LNFI Program Assessment First Post-Assessment Questionnaire

Post-Assessment

Name: _________________________________
Program Title: ___________________________
Date: ___________________________________

Thank you for taking the time to complete this brief questionnaire. In order to gain an understanding of your family group, please involve your child/children’s input where you see fit.

1. Please rate your family group’s overall satisfaction with today’s BSF program. Circle one category.

   Very Dissatisfied   Somewhat Dissatisfied   Neutral   Somewhat Satisfied   Very Satisfied
   1                    2                      3                          4                              5

2. How often do you initiate similar activities to today’s program with your family group? Circle one category.

   Never   Once   A Few Times   6-10 Times   10+ Times   Unsure
   1       2       3               4              5            6

3. Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.

   Never   Once in a while   As often as we can find time   Unsure
   1       2                  3                             4

Please provide additional comments to support your responses for questions 1-3.
4. Please rate the likelihood that your family group will attend today’s BSF family program a second time.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neutral</th>
<th>Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
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<td>3</td>
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</tbody>
</table>

5. Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

- Leave No Trace Family Camp
- Questing and Geocaching
- Cross-Country Ski Tour
- Earth Week Celebration
- Family Snowshoe Hike(s) (expanded from current programming)

6. How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Neutral</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following:  No       Yes       Unsure

Please comment on your response.
(If your answer is Yes, do you feel this influences your empathy for the outdoor environment?)

8. Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
9. Please rate the value you feel that today’s BSF family program brings to your surrounding community. Circle one category.

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
<th>Unsure</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please provide additional comments to support your responses for questions 8-9.

10. Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

Please provide the following information about your family group in attendance today:

Number of Adults: ________________________________
Number of Children (under 18 years of age): ____________
Zip Code: ________________________________

Thank you for your time. Your input is highly appreciated.

We hope you enjoyed the program, and look forward to seeing your family at the BSF again.
APPENDIX F

2007-2008 LNFI Program Assessment Second Post-Assessment Questionnaire

Post-Assessment

Name: ______________________________________________
Program Title, Date Attended: ___________________________
Today’s Date: ________________________________________

Thank you for taking the time to complete this brief questionnaire. In order to gain an understanding of your family group, please involve your child/children’s input where you see fit.

1. Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities? Underline one category.

   No   Yes   Unsure

2. Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities. Underline one category.

   Never   Once   A Few Times   6-10 Times   10 + Times
            1        2        3         4          5

3. Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities. Underline one category.

   Never   Once in a while   As often as we can find time   Unsure
          1        2           3                       4

Please provide additional comments to support your responses for questions 1-3.
4. Please rate the likelihood that your family group will attend additional new BSF family programs. Underline one number for each program category; consider the program(s) you have already attended.

<table>
<thead>
<tr>
<th>Program</th>
<th>Not Very Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Unsure</th>
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</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
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<td>2</td>
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<tr>
<td>Cross-Country Ski Tour</td>
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<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

5. Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. Underline one category.

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
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<tr>
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</table>

6. How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Empathy Level</th>
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<th>Neutral</th>
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</table>

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No Yes Unsure

Please comment on your response.
(If your answer is Yes, do you feel this influences your empathy for the outdoor environment?)

The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

8. Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? Underline one category.

<table>
<thead>
<tr>
<th>Use of Resources</th>
<th>No</th>
<th>Yes</th>
<th>Unsure</th>
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</thead>
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</table>
9. Do you consider the resources/equipment useful within your family group? Underline one category.

Not Useful  Somewhat Useful  Neutral  Very Useful
1           2                     3                   4

10. Do the resources/equipment allow you to initiate new outdoor activities with your family group? Underline one category.

No      Yes       Unsure

Please provide additional comments to support your responses for questions 8-10.

11. What do you find the most useful about the resources/equipment?

12. What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.

13. Please rate the value you feel the overall BSF family programs bring to your family group. Underline one category.

No Value  Low Value  Slight Value  High Value
1              2                     3                          4

Please provide additional comments to support your response for question 13.

14. Please rate the value you feel this BSF family program brings to your surrounding community. Underline one category.

No Value  Low Value  Slight Value  High Value
1              2                     3                          4

Please provide additional comments to support your response for question 14.

Please provide the following information about your family group in attendance at your BSF family program:

Number of Adults: ________________________________
Number of Children (under 18 years of age): ___________
Zip Code: ________________________________

Thank you for your time. Your input is highly appreciated.

We look forward to seeing your family at the BSF in the near future.
APPENDIX G

Self-Reported Environmental Empathy “Case Studies,”
Cross-Programs, Cross-Assessments

Self-Reported Environmental Empathy
(n = 26)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
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<tr>
<td>PRE</td>
<td>POST 1</td>
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APPENDIX H

2007-2008 LNFI Program Assessment Consent Form

Informed Consent to Participate in Human Subject Research

Emily A. Hill, Graduate Assistant at the University of Wisconsin-Stevens Point, is conducting a study to examine the environmental education construct of environmental sensitivity by piloting and evaluating family-oriented, place-based outdoor recreation and educational programs at the Boston School Forest. You are being asked to participate in the assessment portion of this study.

Benefits of participation in the study’s programs and assessments include obtaining further knowledge of: environmental sensitivity, family-oriented outdoor programming, and place-based education. Adult participants partaking in the study will aid in contributing to the general knowledge of the effectiveness of the LNFI family programs, and may contribute to the growing knowledge of the development of environmental sensitivity and environmental literacy within the field of Environmental Education. Families attending LNFI programs will receive a program description and related resources (including equipment and information) for their family at each program.

As part of the study, you will be asked to complete three separate assessment forms. The first assessment consists of 8 questions. This first assessment will be distributed to you upon your arrival at the program. The second assessment consists of 10 questions. This second assessment will be distributed to you upon the conclusion of the program. The third assessment consists of 14 questions. This third assessment will be distributed to you about a month following the program, either through Email or the U.S. mail. These assessments will help Emily A. Hill and the Boston School Forest staff members evaluate the effectiveness of each LNFI program. The assessments will also help in determining the effectiveness and impact of exposure to the programs and the programs’ additional resource materials on the development of environmental sensitivity.

Because you will be asked to complete three assessments, it is anticipated that your time invested in these assessments could take at most an hour.

It will be helpful to compare the results from all three assessments. You can choose, however, to not participate. This decision has no affect on your participation in the LNFI programs in any way. Similarly, your participation in the assessments would not affect your receiving of a program description and related resources (including equipment and information) allotted for your family.

Participating in this study should pose no medical risk to you.

Your assessment responses will be coded so that your name will not appear on any of the forms used for data analysis. No information about you will be released to any one other than yourself. Publication or presentation of the study data would in no way identify you as a participant. Only Emily A. Hill and Karen Dostal will have direct access to the names associated with the codes. Each completed assessment and personal contact information will be kept in a locked file cabinet at the Boston School Forest or at the University of Wisconsin-Stevens Point, and will be destroyed at the end of the study.
If you wish to decline participation in the assessments within this study, or wish to withdraw from participation in any of the assessments within this study, at any time, you may do so without penalty. Any information collected from you up to that point would be destroyed.

(Please turn over)

Once the study is completed, you may receive the results of the study. If you would like these results, or if you have any questions in the meantime, please contact:

Emily A. Hill  
College of Natural Resources  
800 Reserve Street  
University of Wisconsin – Stevens Point  
Stevens Point, WI 54481  
(608) 354-3188  
ehill@uwsp.edu

If you have any complaints about your treatment as a participant in this study or believe that you have been harmed in some way by your participation, please call or write:

Dr. Karlene Ferrante, Chair  
Institutional Review Board for the Protection of Human Subjects  
Academic Affairs Office  
University of Wisconsin-Stevens Point  
Stevens Point, WI 54481  
(715) 346-3712

Although Dr. Ferrante will ask your name, all complaints are kept in confidence.

I have received a complete explanation of the study and I agree to participate in the assessments.

Name_____________________________________________________
Date__________________
APPENDIX I

Program-Specific, Assessment-Specific Quantitative Questions:
Leave No Trace Family Camp 2007

Leave No Trace Family Camp 2007
Family Groups (n = 8)
Adults (n = 9)
Children < 18 years old (n = 17)

Pre-Assessment: COMPILED QUANTITATIVE DATA
(n = 8)

Has your child/children attended a Boston School Forest (BSF) program before today?

Please circle ONE of the following: No Yes (8)

Has your family group attended a BSF program before today?

Please circle ONE of the following: No (7) Yes (1)

Please rate your current interest for each of the following new BSF family programs.
*Circle one number for each program category.*

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>(1)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>(1)</td>
<td>(1)</td>
<td>4</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>(1)</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>(1)</td>
<td>2</td>
<td>(1)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very High</th>
</tr>
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<td>(1)</td>
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<td>(1)</td>
<td>(5)</td>
<td>1</td>
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<td>1</td>
<td>(1)</td>
<td>1</td>
<td>(5)</td>
<td></td>
</tr>
</tbody>
</table>
**Leave No Trace Family Camp 2007**  
Family Groups \((n = 8)\)  
Adults \((n = 9)\)  
Children < 18 years old \((n = 17)\)

**Post-Assessment #1: COMPILED QUANTITATIVE DATA**  
\((n = 7)\)

Please rate your family group’s overall satisfaction with today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Neutral</th>
<th>Somewhat Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 (7)</td>
</tr>
</tbody>
</table>

How often do you initiate similar activities to today’s program with your family group? *Circle one category.*

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1)</td>
<td>2</td>
<td>3 (3)</td>
<td>4 (1)</td>
<td>5 (2)</td>
<td>6</td>
</tr>
</tbody>
</table>

Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. *Circle one category.*

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (6)</td>
<td>4</td>
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</table>

Please rate the likelihood that your family group will attend today’s BSF family program a second time.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neutral</th>
<th>Likely</th>
<th>Very Likely</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4</td>
<td>5 (5)</td>
</tr>
</tbody>
</table>
Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

(1) Leave No Trace Family Camp  
(6) Questing and Geocaching  
(5) Cross-Country Ski Tour  
(5) Earth Week Celebration  
(6) Family Snowshoe Hike(s) (expanded from current programming)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Very High</th>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>(1)</td>
<td>5</td>
<td>6</td>
<td>7</td>
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</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following:  
No  
Yes (7)  
Unsure

Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>1</th>
<th>Not Very Confident</th>
<th>2</th>
<th>Somewhat Confident</th>
<th>3 (4)</th>
<th>Very Confident</th>
<th>4 (2)</th>
<th>Unsure</th>
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</table>

Please rate the value you feel that today’s BSF family program brings to your surrounding community. *Circle one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>1</th>
<th>Low Value</th>
<th>2</th>
<th>Slight Value</th>
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<th>High Value</th>
<th>4 (7)</th>
<th>Unsure</th>
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</tbody>
</table>
Leave No Trace Family Camp 2007
Family Groups (n = 8)
Adults (n = 9)
Children < 18 years old (n = 17)

Post-Assessment #2: COMPILED QUANTITATIVE DATA
(n = 2)

Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities? Underline one category.

No   Yes (2)   Unsure

Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities. Underline one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
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<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (1)</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities. Underline one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
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<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (1)</td>
<td>4</td>
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</table>

Please rate the likelihood that your family group will attend additional new BSF family programs. Underline one number for each program category; consider the program(s) you have already attended.

<table>
<thead>
<tr>
<th>Not Very Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Unsure</th>
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<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>1</td>
<td>2 (1)</td>
<td>4 (1)</td>
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<tr>
<td>Questing and Geocaching</td>
<td>(1)</td>
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<td>3</td>
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<tr>
<td>Cross-Country Ski Tour</td>
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<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
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<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
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</tbody>
</table>
Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. Underline one category.

No Confidence 1  Not Very Confident 2  Somewhat Confident 3  Very Confident 4 (2)  Unsure 5

How would you rate your current empathy for the outdoor environment?

Very Low 1  Neutral 5 (1)  Very High 10 (1)

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following:  No  Yes (2)  Unsure

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? Underline one category.

No  Yes (2)  Unsure

Do you consider the resources/equipment useful within your family group? Underline one category.

Not Useful 1  Somewhat Useful 2  Neutral 3  Very Useful 4 (2)

Do the resources/equipment allow you to initiate new outdoor activities with your family group? Underline one category.

No  Yes (2)  Unsure

Please rate the value you feel the overall BSF family programs bring to your family group. Underline one category.

No Value 1  Low Value 2  Slight Value 3  High Value 4 (2)

Please rate the value you feel this BSF family program brings to your surrounding community. Underline one category.

No Value 1  Low Value 2  Slight Value 3  High Value 4 (2)
APPENDIX J

Program-Specific, Assessment-Specific Qualitative Questions:
Leave No Trace Family Camp 2007

Pre-Assessment
Program Title: LEAVE NO TRACE FAMILY CAMP 2007

3. If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.
   - only as class field trips- and the kids look forward to coming.
   - My children visited BSF with Washington Elementary School, and my son is currently in summer school at BSF.

6. Which family group member(s) influenced your decision to participate in today’s BSF family program?
   - My youngest son. He loves animals, science and learning about the outdoors.
   - Kids bringing home flyer and mom thinking this will be a good family activity.
   - Besides I’m uncomfortable to take the kids camping only.
   - Younger son.
   - Kids.
   - Our son and our daughter.
   - All family members- adults and children
   - Myself. I thought it would be a great way to introduce my family to camping.
   - My 10 year-old son.

7. On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?
   - 4-5 times per month.
   - lots- more on a agricultural experience. Maybe 3 hours/day...feeding cows, gardening, hanging out at a pond, taking a tractor ride, etc.
   - bike-almost daily. Camping-at least 1-2 times/yr. Hiking- 1/mo.
   - a few times (3-4)
- ~ 7x per month
- Approximately 200+ hours/month
- We take walks, and have fires in our fire pit just about weekly.
- Hard to quantify- 12 times a month as a family. Tenting in the backyard.

8. Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- Hiking- exploring nearby parks, gardens. Activities learning about animals.
- We often do it while on vacation by reading tourist guides.
- We enjoy biking, swimming, hiking.
- We enjoy hiking and fishing and just started camping this year. We would like to camp in different National Parks in the future.
- We go to my husband’s Aunt’s house in Tomahawk every summer, and that lets the kids try fishing and riding in boats and canoes- things we don’t do at home. Whenever we try something outdoors, my kids usually love it!
- We often have a backyard fire. It’s one of the kids favorite things to do. The kids ask us as often as we can to do that. We also make a point to spend a day at Sunset Lake as often as we can. The kids ask us, “When can we go to Sunset Lake again?” (My kids typically do not watch much TV and we do not own video games-conscience choice)

Post-Assessment #1
Program Title: LEAVE NO TRACE FAMILY CAMP 2007

1. Please rate your family group’s overall satisfaction with today’s BSF program.
2. How often do you initiate similar activities to today’s program with your family group?
3. Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future.

Please provide additional comments to support your responses for questions 1-3.

- We learned a lot of new ideas. Bear bag- rope tossing. Soap on dish pot. Kids got to do some hands on activities. I’ve been afraid to camp alone w/kids and this gave us a group to do it with.
- Now that we have more knowledge we will do this type of activity more often.
- We used to visit programs at Schmeecle and Jordan Park.
- We appreciated the training in Leave No Trace Behind.
- *I think this was a really well run program. It was very organized and the staff was extremely helpful.*
- With all our new ideas (and new backpack and supplies) we are anxious to use the information and techniques we have learned.
- *I like the fact that the program teaches respect for nature, teaches valuable skills at an adult and child level and helps to bind our family closer.*

7. **Has today’s BSF family program affected your interest in spending time outdoors as a family group?**
   Please comment on your response.

- I don’t camp or cook out w/the kids, but I think I’m more comfortable doing it.
- Involvement in a program like this motivates one to respect and enjoy the natural environment.
- We are thinking of camping in the back country.
- *Preservation for the next generation*
- I would like to try camping with my family now, although I think I would try a cabin
- It reminds us of our impact and gave us principles to follow.
- *This teaches all of us to work as a team and enjoy nature and each other.*

8. **Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program.**

9. **Please rate the value you feel that today’s BSF family program brings to your surrounding community.**

   Please provide additional comments to support your responses for questions 8-9.

- Programs like this one enhance the quality of life in our community. This program teaches us to enjoy the natural environment of our area.
- *We learned the first time about GPS orientation. We might use this if we go hiking in North Wisconsin.*
- Each outdoor experience enhances our confidence- the friendly, helpful and very knowledgeable staff also provided wonderful support.
- I had no idea how to use a compass before this weekend. And I feel much more confident cooking outdoors now.
- The program exceeded my expectations.
- I learned a lot of new things now applying them will be the challenge.
10. Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- I would like to dry food at home now. Maybe next time, the group could cook a scratch lunch from their own dried veggies (vs. prepared package).
- Hiking and camping in state parks and nat. forest.
- We initiate these activities mostly in the summer. We see what Visitor Centers and Parks have to offer. (A few activities every summer.)
- Biking 4x week Green Circle Trail. Swimming 7x week Backyard. Horseback riding 1x week Vesper, WI. Play 7x week Backyard/parks. Walking 3x week Stevens Point.
- I think I will try to initiate a camp out for my family this fall- in a cabin. I don’t think I would have tried it until this weekend.
- We camp with other families ~ 1 per year. We picnic/hike for the day.

Post-Assessment #2
Program Title: LEAVE NO TRACE FAMILY CAMP 2007

1. Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities?
2. Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities.
3. Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities.

Please provide additional comments to support your responses for questions 1-3.

- We spend a lot of time outdoors canoeing and fishing in small lakes.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
Please comment on your response.

- Yes, I have more confidence bringing my children camping. I think it raised their empathy for the outdoor environment.
- I might consider getting a water filter and trying to camp in remote areas.
The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

8. Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program?
9. Do you consider the resources/equipment useful within your family group?
10. Do the resources/equipment allow you to initiate new outdoor activities with your family group?

Please provide additional comments to support your responses for questions 8-10.

- We used the compass for hiking

11. What do you find the most useful about the resources/equipment?

- Compass, backpack, waterbottles
- It was a wonderful collection of things for remote camping.

12. What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.

- Nothing, I think it was all great!
- Nothing

13. Please rate the value you feel the overall BSF family programs bring to your family group.

Please provide additional comments to support your response for question 13.

- I thought it was an excellent program.
- Everybody enjoyed it and we learned new things.

14. Please rate the value you feel this BSF family program brings to your surrounding community.

Please provide additional comments to support your response for question 14.

- I think most families would really enjoy the program.
### APPENDIX K

**Program-Specific, Assessment-Specific Quantitative Questions:**
**Questing and Geocaching for Families 2007**

#### Geocaching and Questing for Families 2007
**Family Groups (n = 12)**

#### Pre-Assessment: COMPILED QUANTITATIVE DATA
**(n = 10)**

Has your child/children attended a Boston School Forest (BSF) program before today?

Please circle ONE of the following:  

- No (2)
- Yes (8)

Has your family group attended a BSF program before today?

Please circle ONE of the following:  

- No (5)
- Yes (5)

Please rate your current interest for each of the following new BSF family programs.  
*Circle one number for each program category.*

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(3)</td>
<td>(1)</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>(5)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>(3)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>(1)</td>
<td>(1)</td>
<td>3</td>
<td>(4)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>(1)</td>
<td>(4)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
</tbody>
</table>
Geocaching and Questing for Families 2007
Family Groups (n = 12)

Post-Assessment #1: COMPILED QUANTITATIVE DATA
(n = 9)

Please rate your family group’s overall satisfaction with today’s BSF program.
*Circle one category.*

<table>
<thead>
<tr>
<th>Very Dissatisfied (1)</th>
<th>Somewhat Dissatisfied (2)</th>
<th>Neutral (3)</th>
<th>Somewhat Satisfied (4)</th>
<th>Very Satisfied (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (8)</td>
<td>4 (3)</td>
<td>2 (5)</td>
<td>1 (3)</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

How often do you initiate similar activities to today’s program with your family group? *Circle one category.*

<table>
<thead>
<tr>
<th>Never (1)</th>
<th>Once (2)</th>
<th>A Few Times (3)</th>
<th>6-10 Times (4)</th>
<th>10 + Times (5)</th>
<th>Unsure (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>3 (5)</td>
<td>2 (5)</td>
<td>1 (3)</td>
<td>4 (3)</td>
<td>6</td>
</tr>
</tbody>
</table>

Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. *Circle one category.*

<table>
<thead>
<tr>
<th>Never (1)</th>
<th>Once in a while (2)</th>
<th>As often as we can find time (3)</th>
<th>Unsure (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (3)</td>
<td>3 (5)</td>
<td>4 (1)</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend today’s BSF family program a second time.

<table>
<thead>
<tr>
<th>Very Unlikely (1)</th>
<th>Unlikely (2)</th>
<th>Neutral (3)</th>
<th>Likely (4)</th>
<th>Very Likely (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (1)</td>
<td>4 (3)</td>
<td>5 (4)</td>
</tr>
</tbody>
</table>
Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

(3) Leave No Trace Family Camp  
(4) Questing and Geocaching  
(6) Cross-Country Ski Tour  
(3) Earth Week Celebration  
(8) Family Snowshoe Hike(s) (expanded from current programming)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

(1) (1) (3) (3) (1)

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following:  
No (1)  
Yes (7)  
Unsure

Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>1 (1)</th>
<th>Not Very Confident</th>
<th>2</th>
<th>Somewhat Confident</th>
<th>3 (4)</th>
<th>Very Confident</th>
<th>4 (4)</th>
<th>Unsure</th>
<th>5</th>
</tr>
</thead>
</table>

(1)

Please rate the value you feel that today’s BSF family program brings to your surrounding community. *Circle one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>1</th>
<th>Low Value</th>
<th>2</th>
<th>Slight Value</th>
<th>3 (1)</th>
<th>High Value</th>
<th>4 (7)</th>
<th>Unsure</th>
<th>5 (1)</th>
</tr>
</thead>
</table>

(1)
**Geocaching and Questing for Families 2007**
Family Groups (n = 12)

**Post-Assessment #2: COMPILED QUANTITATIVE DATA**
(n = 4)

Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities? *Underline one category.*

<table>
<thead>
<tr>
<th>No (2)</th>
<th>Yes (2)</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities. *Underline one category.*

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4 (1)</td>
<td>5</td>
</tr>
</tbody>
</table>

Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities. *Underline one category.*

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (3)</td>
<td>4</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend additional new BSF family programs. *Underline one number for each program category; consider the program(s) you have already attended.*

<table>
<thead>
<tr>
<th>Leave No Trace Family Camp</th>
<th>3</th>
<th>2</th>
<th>3</th>
<th>1</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questing and Geocaching</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

92
Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. Underline one category.

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
<td>4 (2)</td>
<td>5</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Neutral</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9 (2)</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No (1) Yes (3) Unsure

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? Underline one category.

<table>
<thead>
<tr>
<th>No</th>
<th>Yes (3)</th>
<th>Unsure</th>
</tr>
</thead>
</table>

Do you consider the resources/equipment useful within your family group? Underline one category.

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Somewhat Useful</th>
<th>Neutral</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (3)</td>
<td>3</td>
<td>4 (1)</td>
</tr>
</tbody>
</table>

Do the resources/equipment allow you to initiate new outdoor activities with your family group? Underline one category.

No (3) Yes (1) Unsure

Please rate the value you feel the overall BSF family programs bring to your family group. Underline one category.

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
<td>4 (3)</td>
</tr>
</tbody>
</table>

Please rate the value you feel this BSF family program brings to your surrounding community. Underline one category.

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4 (2)</td>
</tr>
</tbody>
</table>
Pre-Assessment (10 pts/10)
Program Title: GEOCACHING AND QUESTING FOR FAMILIES 2007

3. If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.

- Superb- both education for the son and pristine grounds throughout
- Great staff. Age appropriate. Great resource.
- My children come to BSF though their school.
- Participated in open houses. Wanted to do snowshoeing last year but already was filled.
- It is a fun time spending with the family outside.
- Great opportunity to let all utilize the BSF!

6. Which family group member(s) influenced your decision to participate in today’s BSF family program?

- Me- Mom
- Son- brought flyer home from school. Mom- read it and thought “this sounds like fun.”
- Husband
- Me- Mom
- All of us
- I found out about it in district calendar but my son wanted to go
- My wife
- My children
- Husband’s interest and Mom spotting the article in the paper.
- Dad & Mom

7. On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?

- 2x week = 8x month
- 30-60 hrs. per month
- 10 hrs/week, 30 hours
- Very little under 15%
- Hunting, Biking, Fishing, Hiking...Many times a week
- 2 or 3 times
- 2-3 hours
- Four times a month
- 2-4 “not enough!”
- 6 hrs

8. Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- No or inexpensive equipment is a plus. Fall/winter climate & scenery is preferred.
- Usually initiating is the most difficult part. Once we are outside, everyone has a good time. Our family is into biking (Standing Rocks- Stevens Point Area) and last winter we bought skis (Nordic Mtn., Granite Peak) for our family.
- I like it when it is planned out for me- I’m a single parent and don’t have time for planning.
- We go to the state parks a lot. We go cross-country skiing on Green Circle Trail.
- Try to spend time w/local outdoor areas such as: Iverson, Schmeeckle, BSF.
- We go biking, swimming

Post-Assessment #1
Program Title: GEOCACHING AND QUESTING FOR FAMILIES 2007

1. Please rate your family group’s overall satisfaction with today’s BSF program.
2. How often do you initiate similar activities to today’s program with your family group?
3. Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.

Please provide additional comments to support your responses for questions 1-3.

- We always look for fun & educational opportunities. It was a bonus that it was free!
- We’ve already talked about setting up a Questing-type situation in our neighborhood for all the neighbor kids.
- Well laid out- very interesting.
- Free & planned- love it!
- Now that we have a compass maybe more. Can’t do geocaching the way it was done here because don’t have equipment.
- This is interesting, but w/the age of our daughter (3) it makes it difficult to keep their attention.
- If we get to know about some outdoor family activities beforehand, we will surely come.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
   Please comment on your response.

   - We (kids) LOVE BSF!
   - Yes!
   - Definitely, today’s activity gets us thinking about something other than T.V. & video games!
   - Yes
   - Help us to be more aware of our surroundings.
   - We currently take great interest in our outdoor environment.
   - We spend a lot of time outside already.
   - It was fun doing this activity with my son spending time outdoors.

8. Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program.

9. Please rate the value you feel that today’s BSF family program brings to your surrounding community.

   Please provide additional comments to support your responses for questions 8-9.

   - Setting up a Quest does not seem too difficult- very achievable!

10. Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

   - I think the more opportunities there are like this, the better!
   - Now we have an experience that the kids can compare to future activities.
   - This made it easy for us to experience this type of activity. I would not have done this on my own.
- Go to state parks. Ski on Green Circle Trail. Summer vacations are usually to National Parks- this year Mammoth Cave, last year Yellowstone, Tetons & Glacier.
- We do hiking, swimming & biking few times.

Post-Assessment #2 (4 ppts/10)
Program Title: GEOCACHING AND QUESTING FOR FAMILIES 2007

1. Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities?
2. Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities.
3. Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities.

Please provide additional comments to support your responses for questions 1-3.

- We weren’t able to read the GPS properly- our mistake- and gave up on the activity. would have needed my reading glasses & didn’t have them with me.
- My husband set up a couple geocaches in our neighborhood.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
Please comment on your response.

- Already had interest.
- It reinforces my deep empathy for the outdoors.
- I find it enjoyable spending time w/my family outside. Activities like these give us a purpose, instead of just “walking around.”
- It reminded us how fun it is to do things outdoors as a family.

The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

8. Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program?
9. Do you consider the resources/equipment useful within your family group?
10. Do the resources/equipment allow you to initiate new outdoor activities with your family group?

Please provide additional comments to support your responses for questions 8-10.

- Had other compass before
- We spend time outdoors but not where orienteering is in question.
11. What do you find the most useful about the resources/equipment?

- Don’t have to share equipment now. Easy to use.
- Beauty- cleanliness- mutual enjoyment- a place where the son is the resident expert (!)
- They know how to use it, and explain it well.
- Most useful was the instruction on how to use our own GPS to set waypoints.

12. What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.

- Restricted hours for the general public- but it’s understandable.
- Nothing, they did a very nice job.

13. Please rate the value you feel the overall BSF family programs bring to your family group. Please provide additional comments to support your response for question 13.

- As a destination of reliable tranquility & beauty.
- BSF family programs = fun outside w/family

14. Please rate the value you feel this BSF family program brings to your surrounding community. Please provide additional comments to support your response for question 14.

- Don’t think you are getting “non-choir” members to participate.
- If no other value, to illustrate to the children the beauty of a litter-free setting.
- More people need to be aware of these programs! I told other parents about our day…they were unaware of them program & would have come out if they had known.
APPENDIX M

Program-Specific, Assessment-Specific Quantitative Questions:
Cross-Country Skiing for Families 2008

Cross-Country Skiing for Families 2008
Family Groups (total attending = 58, n = 52)
Adults (n = 81)
Children < 18 years old (n = 102)

Pre-Assessment: COMPiled QUANTitative DATA
(n = 50)

Has your child/children attended a Boston School Forest (BSF) program before today?
Please circle ONE of the following: No (4) Yes (46)

Has your family group attended a BSF program before today?
Please circle ONE of the following: No (35) Yes (15)

Please rate your current interest for each of the following new BSF family programs.
*Circle one number for each program category.*

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(1)</td>
<td>(3)</td>
<td>(9)</td>
<td>(6) (1) (13)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>(6)</td>
<td>(2)</td>
<td>(7)</td>
<td>(9) (15)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>(1)</td>
<td>(5)</td>
<td>(8) (1) (34)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>(1)</td>
<td>(5)</td>
<td>(13) (1) (29)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>(3)</td>
<td>(12)</td>
<td>(13) (1) (12)</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td>(4)</td>
<td>(3)</td>
<td>(11)</td>
<td>(10)</td>
<td>(17)</td>
</tr>
</tbody>
</table>
**Cross-Country Skiing for Families 2008**  
Family Groups (total attending = 58)  
Adults (n = 81)  
Children < 18 years old (n = 102)  

**Post-Assessment #1: COMPiled QUANTITATIVE DATA**  
(n = 41)  

Please rate your family group’s overall satisfaction with today’s BSF program.  
*Circle one category.*  

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Neutral</th>
<th>Somewhat Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
<td>4 (1)</td>
<td>5 (39)</td>
</tr>
</tbody>
</table>

How often do you initiate similar activities to today’s program with your family group? *Circle one category.*  

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (4)</td>
<td>2 (2)</td>
<td>3 (11)</td>
<td>4 (9)</td>
<td>5 (15)</td>
<td>6</td>
</tr>
</tbody>
</table>

Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. *Circle one category.*  

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (3)</td>
<td>3 (38)</td>
<td>4</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend today’s BSF family program a second time.  

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neutral</th>
<th>Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1)</td>
<td>2</td>
<td>3</td>
<td>4 (12)</td>
<td>5 (28)</td>
</tr>
</tbody>
</table>
Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

(20) Leave No Trace Family Camp

(24) Questing and Geocaching

(33) Cross-Country Ski Tour

(19) Earth Week Celebration

(34) Family Snowshoe Hike(s) (expanded from current programming)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No (4) Yes (37) Unsure

Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>1</th>
<th>Not Very Confident</th>
<th>2</th>
<th>Somewhat Confident</th>
<th>3 (4)</th>
<th>Very Confident</th>
<th>4 (35)</th>
<th>Unsure</th>
<th>5</th>
</tr>
</thead>
</table>

Please rate the value you feel that today’s BSF family program brings to your surrounding community. *Circle one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>1</th>
<th>Low Value</th>
<th>2</th>
<th>Slight Value</th>
<th>3</th>
<th>High Value</th>
<th>4 (40)</th>
<th>Unsure</th>
<th>5 (1)</th>
</tr>
</thead>
</table>
Cross-Country Skiing for Families 2008
Family Groups (total attending = 58)
Adults (n = 81)
Children < 18 years old (n = 102)

Post-Assessment #2: COMPILED QUANTITATIVE DATA
(n = 19)

Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities? Underline one category.

No (3)  Yes (15)  Unsure (1)

Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities. Underline one category.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1 (1)</td>
<td>2 (1)</td>
<td>3 (8)</td>
<td>4 (5)</td>
<td>5 (4)</td>
</tr>
</tbody>
</table>

Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities. Underline one category.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
<td>2</td>
<td>3 (19)</td>
<td></td>
</tr>
<tr>
<td>Once a while</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As often as we can find time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend additional new BSF family programs. Underline one number for each program category; consider the program(s) you have already attended.

<table>
<thead>
<tr>
<th>Program</th>
<th>Not Very Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(2)</td>
<td>(4)</td>
<td>(2)</td>
<td>4</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>(2)</td>
<td>2</td>
<td>(1)</td>
<td>(3)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>(4)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>(2)</td>
<td>(2)</td>
<td>(6)</td>
</tr>
</tbody>
</table>
Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. *Underline one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4 (17)</td>
<td>5</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Neutral</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9 (1)</td>
</tr>
<tr>
<td>2 (2)</td>
<td>(8)</td>
<td>(1) (2)</td>
</tr>
<tr>
<td>(6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No (6) Yes (13) Unsure

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? *Underline one category.*

<table>
<thead>
<tr>
<th>No (6)</th>
<th>Yes (10)</th>
<th>Unsure (2)</th>
</tr>
</thead>
</table>

Do you consider the resources/equipment useful within your family group? *Underline one category.*

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Somewhat Useful</th>
<th>Neutral</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (2)</td>
<td>3 (2)</td>
<td>4 (12)</td>
</tr>
</tbody>
</table>

Do the resources/equipment allow you to initiate new outdoor activities with your family group? *Underline one category.*

<table>
<thead>
<tr>
<th>No (2)</th>
<th>Yes (12)</th>
<th>Unsure (2)</th>
</tr>
</thead>
</table>

Please rate the value you feel the overall BSF family programs bring to your family group. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4 (17)</td>
</tr>
</tbody>
</table>

Please rate the value you feel this BSF family program brings to your surrounding community. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (19)</td>
</tr>
</tbody>
</table>
APPENDIX N

Program-Specific, Assessment-Specific Qualitative Questions:
Cross-Country Skiing for Families 2008

Pre-Assessment
Program Title: CROSS-COUNTRY SKIING FOR FAMILIES 2008

3. If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.

- School had a ropes/adventure night for whole family. Great experience.
- Love BSF-always fun.
- School activities.
- Wonderful compassing & tree ID class
- Only with Cub Scouts
- High Ropes Course
- School
- My daughter & I came to a snowshoeing event last winter. Very informative and a good way to expose kids and adults to different activities.
- All have been initiated thru school.
- It’s awesome, cool things to do here. We come for school & Girl Scouts & other events.
- School field trips
- Snow shoeing- fun, informative
- Ropes courses, school trips, Daisy Troop

6. Which family group member(s) influenced your decision to participate in today’s BSF family program?

- Me
- Me
- Mom + son
- Myself- Mom
- Myself
- Our whole family
- Teacher in the district
- Father
- The Mom
- My daughter, age 7
- Children
- 11-year old + Mom
- Mom
- Kids & me.
- Father
- Mom (me)- with encouragement from kids
- All together- Mom reminded of event.
- Daughter
- Daughters
- All were excited to participate
- Son
- Kids brought home info from school. We all thought it would be fun.
- Me- the mother
- My wife and I like to cross country ski and this was a good opportunity to expose our kids and see if they like it before spending $$ on equipment for them.
- Mom
- All of us
- Mom
- Myself & daughter
- Myself, the children really didn’t want to
- Mom-me
- Me- sounded fun. I haven’t C.C. skied since high school (1986)! Haha.
- Me
- My son
- To enjoy some time outdoors, enjoying a winter day together. Plus we had just gone skiing on a BSF school trip.
- I received a notice from McKinley School & thought it sounded like a lot of fun. Our kids have not skied before.
- Friend of family
- Dad
- My son
- Father
- School District program- our kids
- Mom
- Son
- All of us
- Mom and daughter
- Son
- Both parents
- Children
- Children- X country skiing is new to us- trying something different.

7. On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?

- Summer everyday. Winter 1-2x month (everyday through windows)
- 3-4x week- except winter
- Not as often as I would like. More in summer.
- Couple times/week
- At least 2x/week
- Biking & walking every day spring, summer, & fall. Winter maybe every other day.
- 40% in winter. 80% in fall/spring/summer.
- Often over ½ days. Winter: seldom.
- More in summer- 3-4x's/week. Trying to do more in winter.
- 2 times per month.
- As often as we can. Camping, biking, sledding, fishing, etc.
- Try to get out on walks, bike ride, hikes, sledding, snowshoeing, and bird watching with grandparents. Spring break- Utah to hike.
- Every day with reasonable weather.
- 10+ hours.
- 4 times.
- Winter 8-10/x month. Summer 20x/month or more.
- Quite a bit.
- Winter- 2/week. Summer/Spring/Fall- 5/week.
- 2-3/week.
- At least once a week.
- Everyday during late spring, summer and early fall, less during the winter.
- Summer 10 times.
- 15-20/x month
- Winter- much less- maybe 2x/month. Spring summer- much more- every weekend & a couple of days a week.
- I would guess on average about once/week. More in warm weather, less in cold.
- Few times.
- Spring, Summer, Fall- every chance we have. Winter- maybe 2x a month.
- Daily- shorter in winter months longer in summer months. Summer may spend an entire weekend outside.
- A few hours a day
- Fishing, camping
- Family- 1x week. Girl Scouts- monthly +
- Quite a bit. We don’t have a cable/dish T.V. (or Playstation, Xbox, etc.) or internet so we are outside a lot especially during summer- biking/playing or whatever 😊
- About once a month
- Daily in summer. One day- two days in winter.
- Every weekend if possible plus after school.
- 5x/month
- Not enough at all. It’s harder to keep their interest the older they get.
- 5 times a month, maybe as high as 10.
- Daily when weather is not too cold
- 1-2 times a month (1-2 hours at a time)
- 8-10 times/month
- Very often depending on the month
- Daily
- 3 or 4x/month
- At least weekly, about 6x
- 1x/month
- Walking- winter. Summer- walking, swimming, biking.
- Every day.
8. Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- I have to push the kids to do activities other than just playing outside, but after they go to the program/activity they usually have positive feedback.
- Organized, family events are easier to get going.
- Would love to see X-country skiing as a monthly or bi-monthly event.
- Our family is extremely active with outdoor activities all throughout the U.S. since my son’s birth.
- Same answer as #7. Our outdoor experiences are something we always look forward to, especially biking on the Green Circle. We also like going to the river to see the ducks & ride along it.
- Family is very willing to try new activities. We would like to do more in winter.
- Green Circle- biking, walking. Downhill skiing.
- Trying to get some outdoor exercise.
- We like playing/sledding out on our family’s land, we enjoy Iverson Park.
- We like to get outside- try to walk daily.
- Camping, hiking, sledding.
- Cross Country Skiing is great activity for the school forest. Good exercise.
- We love to bike, find new places to fish & swim. We camp and hike new places.
- It’s usually fishing!
- Often do activities in cooperation w/scouting & church groups.
- Sledding couple of times a season. Playing in yard 2-3 times a week. In summer kids play soccer, have swim lessons. Boating, swimming and fishing almost every weekend in summer.
- We like summer activities because it’s not so hard to get ourselves outside. The cold of the outside stops us. Backyard, around the neighborhood, biking, to the swimming pool.
- We try to expose our kids to lots of different activities. We go camping, fishing, biking, hunting, hiking, swimming frequently (15-20/x month). We enjoy these activities mostly throughout the whole state of Wisconsin for variety.
- During spring & summer quite a bit of hiking & biking. Some years (not in the last 2) backpacking trips. Also swimming and very occasionally canoeing. We do a lot of outdoor activities: swimming, hiking, sailing in Maine where we go for vacation. Here in Stevens Point a lot of biking on Green Circle.

- Our family likes to camp, hike, fish and generally spend time outdoors.

- Much more difficult to spend time outside during the winter months. Spend a lot of time during the summer in the garden, planting trees, walking, riding bike, etc.

- We do anything to turn off TV & get out of the house. The community offers a lot of options.

- I think, for the most part, the kids are slightly reluctant because of TV & all of the other technological devices. But it is something that you have to make happen on a regular basis.

- Sled, ski, bike, camp, snowshoe. WE LOVE TO BE OUTDOORS. We typically bring friends with us.

- It’s usually not hard.

- Bike riding- all over Stevens Point. Sledding at Iverson Park.

- We often hike, ski, or snowshoe in the winter. In the summer we spend a lot of time swimming, biking and playing outside.

- Anywhere in WI weather permitting and as often as we can: biking, sledding, walking, skiing, snowmobiling, ATVing.

- As the kids get older, they are less interested in doing family activities. They’d rather play with their friends. I’m trying to introduce them to new activities, like today, that they’d find as enjoyable as we, the parents, do.


- We live/own land that is in conservancy- being outdoors is a huge part of our lives- doesn’t require a lot of planning because it’s so close.

- I am the primary initiator…but my kids are getting more interested. My husband is an avid hunter/angler…I’m more into biking, hiking & winter sports.

- We like to “do” things and get out of the house.

- Hikes, walks, sledding, playing, camping, canoeing, swimming, fishing. We don’t have problems initiating- it’s finding time with busy schedules that sometimes makes it hard. We love spending time outdoors as a family.
- We spend quite a bit of time outdoors- with our children being 2 & 4 most of our activities are pretty short, 1-2 hours. Winter- ice fishing, sledding & snowshoeing are what we do most. Rest of year we spend a lot of time outdoors (almost daily) gardening, hiking, biking, fishing, etc. We do almost everything in Portage County & visit Schmeeckle, Standing Rocks & city parks a lot.
- We go biking, occasionally camping/fishing. We are new to WI (moved from Louisiana) so we are very interested in learning about outdoor winter sports and activities.
- Lifelong Wisconsin residents- but not too interested in outdoor sports- mostly just walks- all are interested.

Post-Assessment #1
Program Title: CROSS-COUNTRY SKIING FOR FAMILIES 2008

1. Please rate your family group’s overall satisfaction with today’s BSF program.
2. How often do you initiate similar activities to today’s program with your family group?

- We are very active in the out of doors. Bike, walk, swim, kayak.

3. Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.

- Where able- we try to go to local parks- state, local, national.

Please provide additional comments to support your responses for questions 1-3.

- Excellent program
- Family had fun, hope to do it again soon.
- Advertising through the school (K-12) was a great idea. You may also want to advertise at the University though Faculty/Staff & Students “Message of the Day.”
- We had a great time today. Due to other commitments, we got here later in the day so we didn’t have a lot of time to do/participate in both activities.
- There was room on either side of the trail when one track or the other became a rut and uncomfortable to push through.
- We try to expose our kids to lots of different activities and continue the activities that we all can enjoy together.
- The kids really enjoyed learning to ski. They are already asking to do it again. This is the type of activity that our family tries to do as often as we are able to.
- It is nice to see the schools to promote family involvement.
- It was great! Everybody was so nice and also very helpful!
- #3- time is an issue but having this experience increases the probability that we will make time.
- I am definitely interested in more info on activities like this.
- We brought friends today that haven’t skied. The friends enjoyed & would like to ski again.
- It was fun- wish they had a longer trail- we did yellow & pink trails.
- Now that we have done this, next time we may invite others to join us (friends).
- My oldest daughter and I had a great time. We would love to bring out 4 year old daughter to the next event. She has come along on BSF school trips.
- We had a great time. Even better, we were physically active.
- This was my first time cross-country skiing. My son’s second time- we was first exposed to this when his class participated- he expressed an interest in skiing so this was a wonderful opportunity for us to try it. We will definitely do this again.
- This was cool. We will do more of this.
- We had an awesome time!
- We haven’t skied as a family. As our children age, we’ll ski more.
- We do family activities very often but we have never been cross-country skiing and winter activities are a little new to us (we just moved here from the South). We loved the skiing and will do it again as soon as possible.
- Winter activities always need a little help. Summer- no problem!

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
Please comment on your response.

- It tires them out!! 😊
- We like to be active and outdoors. It is an added bonus to spend time together learning some new physical activity.
- (Yes) …somewhat.
- We had a blast & very good exercise.
- Any time we spend time outside gives us more respect for our environment & makes us want to spend more time together AND outside.
- We enjoy doing outdoor activities. We enjoyed being able to try out skiing and snowshoeing for free.
- Yes, it needs to be appreciated more often.
- Already empathetic towards environment and teaching children to appreciate nature as well as respect it.
- No. I already have some but I've always liked having trees of woods and grass rather than cement except for the vehicles sake.
- This was a good way to expose our kids to another outdoor winter activity we can all do together. I feel this “silent sport” is a great way to enjoy the outdoors, see and explore and understand the environment.
- It was so much fun and gives me incentive to try and do more winter sports. I had always wanted to try cross-country skiing but it is difficult to coordinate if you don’t have skis- this made it so convenient and easy to manage. We REALLY appreciate it! And are considering trying to get some skis for ourselves!
- I have always enjoyed outdoor activities. This just reinforces the fact that the whole family can enjoy them.
- (Yes)...Absolutely!
- Definitely increases enjoyment therefore increases empathy.
- It was very fun.
- The girls liked to smell the outdoors.
- When you live in Wisconsin, you have to go with the flow with all the elements of weather- either you love it or hate it.
- I commented often about how beautiful it was out there. How peaceful.
- We love being outdoors and spend lots of time as a family enjoying the time together either on our property west of Stevens Point or up north (Hurley, WI area).
- No, already had strong empathy.
- Loved it- we had a blast.
- Sure.
- We now have a new activity to do outdoors.
- Great to know you have this. We need to be exposed to new outdoor activities.
- Yes
- This is a great way to get outdoors during winter.
- We often think it will take more time to have fun; we have lots of plans for today (!) but stuck with our decision to come here 😊
- Already high
- It expanded our understanding of winter time activities.
8. Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program.

   - I feel I need more practice but it was a good start.

9. Please rate the value you feel that today’s BSF family program brings to your surrounding community.

   - We love being out in nature.
   - Please keep it up!!! It is great & SO important!

Please provide additional comments to support your responses for questions 8-9.

   - Help doing things as a family and not having the high expense of trying things.
   - BSF is a great opportunity for families that would not normally take the initiative to do outdoor activities together…and the fact that it’s no expense allows everyone to participate.
   - Gives families a chance to get out of the house and enjoy a fun program right in our own town.
   - Cross Country skiing is relatively easy for anyone to try and it should be encouraged in any family. It is an investment personally and it’s nice to have no cost programs and usage available.
   - I enjoy many outdoor activities and try to include my kids and others through scouts, school, etc.
   - I just can’t express how wonderful an event this was! The staff was so helpful & enthusiastic, the setting is gorgeous as is the whole facility. I am really so grateful for this wonderful opportunity to try a new outdoor activity with my daughter that it would have been difficult to do otherwise.
   - Making family friendly outdoor activities available increases the communities’ awareness of outdoor resources and issues.
   - I think it shows families how fun the outdoors can be. And if we don’t take care of it we would not be able to do things like we did today. Keeps us in touch with the outdoor environment around us.
   - There is very little for kids to do in Stevens Point.
   - Nice opportunity to try skiing when haven’t before.
   - Everything we needed was provided. We didn’t have to worry about not having the right things.
   - Stressing the importance of the environment and protecting it is a very
important value to instill in our children. This is especially important for children who play inside all the time and don’t know how to enjoy the outdoors.
- Awareness always helps.
- Staff/volunteers very helpful in demonstrating & answering questions.
- This was awesome. Keep doing stuff like this!!
- The community programs are of great value to the community & to the school district & school forest program.
- It was great seeing how many families were out here.

10. Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- Excellent program that people can enjoy this is in the community. I didn’t know this was here.
- Keep up the good work.
- Outdoor camping (summer-winter) in Eau Claire, sledding at Iverson & Eau Claire, orienteering- Boston School Forest & Eau Claire. We do lots of camping as a family and going more activities like skiing, snowshoeing, biking, etc.
- It may seem like a lot of work to get everything together and get started, but once you’re all out there, it’s all worth it. There are the times our kids are going to remember! Time spent having fun together! Thank You!
- Last year we tried to use the outdoor skating rinks. We use plowed snowhills for sledding. This year we did not sled or skate as much but the children & we shoveled.
- During the spring & summer we do a good amount of outdoor activities, but not as much in the winter, in part because we don’t own the equipment. And also because by the time I get home from work it is dark. We would like to do more outdoors but often are limited by available time.
- With young kids, we try to make outdoor activities fun so the kids look forward to doing them.
- More difficult to initiate if one member of family does not enjoy.
- We want to do it as often as possible.
- The opportunity to try for free is great. Offers opportunity to people who may NOT otherwise have.
- Too bad there wasn’t enough skis to go around- but in that result- this was a good turnout! Then 😊!! I will refer this program to friends & clients.
- Sledding at Iverson- weekly. Hiking all summer. Going to the local parks weekly.
- We will continue to enjoy the outdoor activities we have come to enjoy. Walking, biking, snowmobiling, skiing, ATVing, sledding.
- Great for the kids and adults alike.
- It’s more challenging to do outdoor tasks in the wintertime. Being exposed to cross-country skiing can now be added to our activities.
- This was great! We need to expose more families to these things!
- This is a great way to get out family involved in outdoors activities. Thanks!
- We hike, fish a lot- camp, too.
- We do lots outside together! All year long!
- We do a lot outdoors- not as often in the winter, but will do more as our children get older.
- This part of WI seems very- hunting, fishing, snow-mobile oriented- had to find “quieter” family activities that don’t require tons of equipment.

Post-Assessment #2
Program Title: CROSS-COUNTRY SKIING FOR FAMILIES 2008

1. Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities?
2. Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities.
3. Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities.

Please provide additional comments to support your responses for questions 1-3.

- We always try to get outside at least once a day to enjoy nature in some way.
- Your program gave us more ideas for what to do during winter time! Thanks-this is a great program!
- #1- but our interest level hasn’t risen- we are always interested.
- The event renewed an interest in getting our kids out skiing, but we need to buy equipment for them. We will definitely do more as they get older.
- The program was wonderful. It introduced us to cross-country skiing to the point that we desire to make it a regular part of our lives. We have already looked into obtaining some equipment of our own.
- We are an active family already- but loved the chance to go to BSF as a family- both kids have very much enjoyed their elementary school field trips there.
- This outing actually encouraged my husband and I to purchase x-country skis. We are looking into a rental program for the kids.
- We enjoy doing activities as a family.
- We are an active family. We tend to participate in a lot of outdoor activities. I did appreciate the opportunity to bring my children’s friends. While we own skis/snowshoes, our children’s friends don’t.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
   Please comment on your response.

- Yes…we try to preserve nature as best we can.
- We love to spend time outdoors, our interest hasn’t changed.
- Yes- but it was already pretty high to begin with. This program introduced us to many more options during winter time.
- No, we already have great interest.
- Already spend a lot of time outdoors as a family.
- Anything that allows me to spend more time outside influences my feeling towards the outdoors.
- Already do many family outdoor activities.
- Always have liked doing outdoor activities with family.
- We value our time together, enjoy the environment & seek ways to stay fit.
- It reinforces our love for the outdoors and our commitment to being good stewards of the outdoor environment.
- Yes.
- We had a great time cross country skiing.
- We enjoy participating/learning/activities
The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

8. Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program?

9. Do you consider the resources/equipment useful within your family group?
   - We don’t have skis.

10. Do the resources/equipment allow you to initiate new outdoor activities with your family group?
    Please provide additional comments to support your responses for questions 8-10.
    - We don’t have skis we do a lot of snowmobiling & skating.
    - It provided the opportunity for our children to “try” new experiences without the large cost sometimes involved in the activities.

11. What do you find the most useful about the resources/equipment?
    - You have all sizes.
    - Anything that gets families working together and particularly doing these outdoors is a good thing!
    - Free.
    - We did not know how to or have equipment to cross-country ski. The resources and equipment enabled us to learn and appreciate cross-country skiing.
    - It was fun to try it- without bringing equipment
    - There was lots of equipment, and the staff was very friendly.
    - List of cross country ski areas.
    - Free
    - Cost

12. What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.
    - Not enough for all who attended.

13. Please rate the value you feel the overall BSF family programs bring to your family group.
    Please provide additional comments to support your response for question 13.
    - Gets people out.
- We hope to take advantage of more programs, and thus the value of BSF programs will increase.
- It’s an easy way to introduce our children to outdoor activities for which we don’t have equipment and a different site to pursue those interests.
- We have our own skis and would have gone elsewhere.
- Even our exchange UWSP students had fun.
- The actual space at BSF is amazing and it’s great to be so close to a resource like this!

14. Please rate the value you feel this BSF family program brings to your surrounding community.

Please provide additional comments to support your response for question 14.

- I didn’t even know you were here.
- I wish more people knew & low-income families had transportation & a way to find out about the programs.
- The programs are a great way to connect the community to the school, to get people involved in outdoor recreation, and to increase their awareness of the environment which all leads to a greater sense of community and potentially to a greater interest in environmental issues that affect us all.
- Encourages families to spend time, get outside & enjoy snow (2 UWSP students who are exchange students and their first time skiing, too).
- Not only is BSF great for school groups to learn and experience, but also for scouting groups and other community groups.
- Thank you.
APPENDIX O

Program-Specific, Assessment-Specific Quantitative Questions:
Family Snowshoe Adventure 2008

Family Snowshoe Adventure 2008
Family Groups (total attending = 13, n = 12)
Adults (n = 18)
Children < 18 years old (n = 20)

Pre-Assessment: COMPILED QUANTITATIVE DATA
(n = 12)

Has your child/children attended a Boston School Forest (BSF) program before today?
Please circle ONE of the following:  No (2)  Yes (10)

Has your family group attended a BSF program before today?
Please circle ONE of the following:  No (7)  Yes (6)

Please rate your current interest for each of the following new BSF family programs.
Circle one number for each program category.

<table>
<thead>
<tr>
<th>Program</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(1) 2</td>
<td>(2) 2</td>
<td>(4) 2</td>
<td>(1)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>(1) 2</td>
<td>(2) 2</td>
<td>(3) 1</td>
<td>(3)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>(1) 2</td>
<td>3</td>
<td>(2) 8</td>
<td>6</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1 2</td>
<td>(1) 1</td>
<td>(10) 6</td>
<td></td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1 2</td>
<td>(2) 3</td>
<td>(4) 1</td>
<td>(6)</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
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<td></td>
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<td></td>
<td>(6)</td>
</tr>
</tbody>
</table>
Family Snowshoe Adventure 2008
Family Groups (total attending = 13)
Adults (n = 18)
Children < 18 years old (n = 20)

Post-Assessment #1: COMPILED QUANTITATIVE DATA
(n = 5)

Please rate your family group’s overall satisfaction with today’s BSF program. Circle one category.

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Neutral</th>
<th>Somewhat Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (1)</td>
<td>5 (4)</td>
</tr>
</tbody>
</table>

How often do you initiate similar activities to today’s program with your family group? Circle one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (4)</td>
<td>4 (1)</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3 (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend today’s BSF family program a second time.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neutral</th>
<th>Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (2)</td>
<td>5 (3)</td>
</tr>
</tbody>
</table>
Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

(3) Leave No Trace Family Camp
(3) Questing and Geocaching
(5) Cross-Country Ski Tour
(3) Earth Week Celebration
(4) Family Snowshoe Hike(s) (expanded from current programming)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No [ ] Yes [4] Unsure [1]

Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (5)</td>
<td>5</td>
</tr>
</tbody>
</table>

Please rate the value you feel that today’s BSF family program brings to your surrounding community. *Circle one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (5)</td>
<td>5</td>
</tr>
</tbody>
</table>
Family Snowshoe Adventure 2008
Family Groups (total attending = 13)
Adults (n = 18)
Children < 18 years old (n = 20)

Post-Assessment #2: COMPILED QUANTITATIVE DATA
(n = 4)

Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities? 
_Underline one category._

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes (4)</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities. <em>Underline one category.</em></td>
<td>1</td>
<td>2 (1)</td>
<td>3 (2)</td>
</tr>
<tr>
<td>Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities. <em>Underline one number for each program category; consider the program(s) you have already attended.</em></td>
<td>1</td>
<td>2</td>
<td>(1)</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend additional new BSF family programs. _Underline one number for each program category; consider the program(s) you have already attended._

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Not Very Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
<td>(3)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>(1)</td>
<td>2</td>
<td>3 (1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>1</td>
<td>2</td>
<td>(2)</td>
<td>(1)</td>
</tr>
</tbody>
</table>
Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. *Underline one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (4)</td>
<td>5</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Neutral</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>(2)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No Yes (4) Unsure

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? *Underline one category.*

<table>
<thead>
<tr>
<th>No</th>
<th>Yes (2)</th>
<th>Unsure (1)</th>
</tr>
</thead>
</table>

Do you consider the resources/equipment useful within your family group? *Underline one category.*

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Somewhat Useful</th>
<th>Neutral</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (1)</td>
<td>3</td>
<td>4 (3)</td>
</tr>
</tbody>
</table>

Do the resources/equipment allow you to initiate new outdoor activities with your family group? *Underline one category.*

<table>
<thead>
<tr>
<th>No</th>
<th>Yes (3)</th>
<th>Unsure (1)</th>
</tr>
</thead>
</table>

Please rate the value you feel the overall BSF family programs bring to your family group. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (4)</td>
</tr>
</tbody>
</table>

Please rate the value you feel this BSF family program brings to your surrounding community. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (4)</td>
</tr>
</tbody>
</table>
APPENDIX P

Program-Specific, Assessment-Specific Qualitative Questions:
Family Snowshoe Adventure 2008

Pre-Assessment
Program Title: FAMILY SNOWSHOE ADVENTURE 2008

3. If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.

- I think it’s wonderful to have a program such as this. It not only brings the “family” closer together but is very educational.
- Super- not TOO fussy but very interesting
- We came to a school function (my son and I) that entailed environmental education, sledding, crafts, etc.
- We love to come here. We attended the x-country ski day.

6. Which family group member(s) influenced your decision to participate in today’s BSF family program?

- I did.
- Sister & her family.
- Wife
- My daughters
- My wife
- All of us
- Me- mom
- I did
- My son
- First grade son
- My ten-year-old son

7. On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?

- In winter, 4-8 times a month, summer almost daily.
- 8 hours
- 8 hours
- Almost daily during summer. Several days/week spring & fall. Maybe twice/month during winter.
- Lots of biking in the summer.
- 3 or 4 hours
- 4 weekends
- Almost none altogether
- We try to do many family activities outdoors. In summer we are outdoors daily and in winter we try to do outside activities once a week (at least!).
- We bike & camp 2-4 weekends per month April-October. We cook out almost every night in the summer and occasionally in winter. We go sledding.
- 10-14 days
- Not too often in the winter. Maybe a handful of times through the winter months. More often in the spring, summer & fall- probably about once a week.

8. Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

- I’m a student at UWSP majoring in Environmental Ed., so getting my children involved in the outdoors is very important. We live close to the Green Circle Trail, so we’re on that hiking, biking all year round. We look at different trees and try to watch for birds. We have a hawk’s nest close to our backyard, so we watch that daily in the summer. We also take them fishing a lot.
- The majority of time in winter is sledding, some just playing in the snow.
- Summer, spring & fall lots of walking, biking, camping. Some sports such as soccer & swimming.
- Infrequently; usually when we go to family that have forests on property.
- Not easy- one of us doesn’t like cold.
- Sometimes hard to get the kids & dad outside when it’s cold. We hike in the summer w/grandparents. My dad is a botanist (wildlife esp) so he takes us on plant walks.
- We try to spend as much time outdoors as we can, and no one in the family objects!
- We enjoy hunting, fishing, hiking, biking & camping.
- We enjoy campfires at home (2x month) in nice weather. We enjoy swimming at pools, waterparks & beaches. We enjoy walking the dog at the dog park. We enjoy x-country
skiing around home & at the dog park. We enjoy riding bikes & walking on the Green Circle. We enjoy sledding at Iverson (2-3 times each winter). We enjoy ice skating at Willett & Goerke (6-8 times each winter).

Post-Assessment #1
Program Title: FAMILY SNOWSHOE ADVENTURE 2008

1. Please rate your family group’s overall satisfaction with today’s BSF program.
2. How often do you initiate similar activities to today’s program with your family group?
3. Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.
   Please provide additional comments to support your responses for questions 1-3.
   - The boys enjoy doing outdoor activities.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?
   Please comment on your response.
   - We might buy snowshoes.
   - We will be purchasing snowshoes so we can go more often.
   - Yes

8. Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program.
9. Please rate the value you feel that today’s BSF family program brings to your surrounding community.
   Please provide additional comments to support your responses for questions 8-9.
   - Programs like this help get my family outdoors- organized events help us initiate further outdoor activities.

10. Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).
   - Hiking at Jordan Park or Green Circle, mostly in summer.
   - We camp & bike 2-4 weekends per month April-October. We sled, hike, cook outside, etc.
1. Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities?

2. Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities.

3. Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities.

Please provide additional comments to support your responses for questions 1-3.

- Our kids really enjoyed snowshoeing. It’s just one of those things that if it’s not too cold and we have time, we’ll do more of it. But this would be something we would make time to do.
- Organized events force us to set aside the time to do it. And usually it’s more fun in a group.
- Our schedule is already so full that finding time is difficult. But we want to make the time occasionally to get outside and do things together thanks to the fun time we had snowshoeing. We even bought snowshoes and tried them out in the backyard.

7. Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please comment on your response.

- As our kids get a little older and find this activity easier to do, we will be doing a lot more snowshoeing.
- Enjoyable.
- Yes

The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

8. Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program?

9. Do you consider the resources/equipment useful within your family group?

- Really appreciated the smaller snowshoes for my 4 and 6 year olds. They found them very easy to walk in.

10. Do the resources/equipment allow you to initiate new outdoor activities with your family group?
Please provide additional comments to support your responses for questions 8-10.

- When we got home, anything we brought home was put to the side for “later,” including this survey. Again the business factor.

11. What do you find the most useful about the resources/equipment?

- Along with my comment above (smaller snowshoes), ease of putting snowshoes on.
- Family time outdoors.
- Gets us outdoors doing something new.
- Thinking about the snowshoes we used at BSF affected our later snowshoe purchase.

12. What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.

- A little hard to get off when you’re cold!
- The night was perfect.
- Anything extra that’s a take-home thing is at high risk of being lost or quickly forgotten.

13. Please rate the value you feel the overall BSF family programs bring to your family group.
Please provide additional comments to support your response for question 13.

- It’s a great way to get the kids to try new things before buying expensive equipment, and it’s a wonderful environment!
- Fun- something new & different than normal activities.
- Once you set out that first time, it sort of breaks the ice and opens your eyes. You think, “Yeah, we can go there once in a while.”

14. Please rate the value you feel this BSF family program brings to your surrounding community.
 Please provide additional comments to support your response for question 14.

- I think it’s great for the community. I thought there would have been a lot more people there. But to keep these kinds of programs going, I know our family would come out as often as we can to support them. I would hope others would too, for this is important.
- Fun family oriented programs & free.
- It influences other groups to get involved and open things to the community.
APPENDIX Q

Compiled Quantitative Questions: Pre-Assessment


Family Groups (total attending = 91)
Adults (n ~ 120, w/12 for GQ data)
Children < 18 years old (n ~ 139, w/o GQ data)

Pre-Assessment: COMPILED QUANTITATIVE DATA
(n = 80)

Has your child/children attended a Boston School Forest (BSF) program before today?
Please circle ONE of the following: No (8) Yes (72)

Has your family group attended a BSF program before today?
Please circle ONE of the following: No (54) Yes (27)

Please rate your current interest for each of the following new BSF family programs. Circle one number for each program category.

<table>
<thead>
<tr>
<th>Program</th>
<th>Very Low Interest</th>
<th>Medium</th>
<th>Very High Interest</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(5)</td>
<td>(4)</td>
<td>(12)</td>
<td>(10)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>(7)</td>
<td>(2)</td>
<td>(10)</td>
<td>(16)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>(1)</td>
<td>(5)</td>
<td>(8)</td>
<td>(13)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>(1)</td>
<td>(3)</td>
<td>(8)</td>
<td>(19)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>(1)</td>
<td>(4)</td>
<td>(19)</td>
<td>(20)</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Very Low</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(4)</td>
<td>(3)</td>
<td>(6)</td>
<td>(3)</td>
<td>(18)</td>
<td>(15)</td>
<td>(30)</td>
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</tbody>
</table>
APPENDIX R

Compiled Quantitative Questions: First Post-Assessment


Family Groups (total attending = 91)
Adults (n ~ 120, w/12 for GQ data)
Children < 18 years old (n ~ 139, w/o GQ data)

Post-Assessment #1: COMPILED QUANTITATIVE DATA
(n = 62)

Please rate your family group’s overall satisfaction with today’s BSF program. Circle one category.

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Neutral</th>
<th>Somewhat Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (1)</td>
<td>4 (3)</td>
<td>5 (58)</td>
</tr>
</tbody>
</table>

How often do you initiate similar activities to today’s program with your family group? Circle one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>A Few Times</th>
<th>6-10 Times</th>
<th>10 + Times</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (5)</td>
<td>2 (2)</td>
<td>3 (23)</td>
<td>4 (14)</td>
<td>5 (18)</td>
<td>6</td>
</tr>
</tbody>
</table>

Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future. Circle one category.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>As often as we can find time</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (8)</td>
<td>3 (53)</td>
<td>4 (1)</td>
</tr>
</tbody>
</table>

Please rate the likelihood that your family group will attend today’s BSF family program a second time.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neutral</th>
<th>Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1)</td>
<td>2 (1)</td>
<td>3 (3)</td>
<td>4 (17)</td>
<td>5 (40)</td>
</tr>
</tbody>
</table>
Which additional, new BSF family programs would you be interested in attending with your family group? *Circle all programs of interest.*

(27) Leave No Trace Family Camp  
(37) Questing and Geocaching  
(49) Cross-Country Ski Tour  
(30) Earth Week Celebration  
(52) Family Snowshoe Hike(s) (expanded from current programming)

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Neutral</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Very High</th>
<th>9</th>
<th>10</th>
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</tr>
</tbody>
</table>

(2) (2) (4) (2) (14) (1) (12) (25)

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following: No (5) Yes (55) Unsure (1)

Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program. *Circle one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>1 (1)</th>
<th>Not Very Confident</th>
<th>2</th>
<th>Somewhat Confident</th>
<th>3 (12)</th>
<th>Very Confident</th>
<th>4 (46)</th>
<th>Unsure</th>
<th>5</th>
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</thead>
<tbody>
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</tr>
</tbody>
</table>

Please rate the value you feel that today’s BSF family program brings to your surrounding community. *Circle one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>1</th>
<th>Low Value</th>
<th>2</th>
<th>Slight Value</th>
<th>3 (1)</th>
<th>High Value</th>
<th>4 (49)</th>
<th>Unsure</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
APPENDIX S

Compiled Quantitative Questions: Second Post-Assessment

Leave No Trace Family Camp 2007, Geocaching and Questing for Families 2007,

Family Groups (total attending = 91)
Adults (n ~ 120, w/12 for GQ data)
Children < 18 years old (n ~ 139, w/o GQ data)

Post-Assessment #2: COMPILED QUANTITATIVE DATA
(n = 29)

Since your participation in the BSF family program, have you gained interest in similar outdoor
family group activities? Underline one category.

No (5)  
Yes (23)  
Unsure (1)

Since your participation in the BSF family program, please rate how often you have initiated
similar outdoor family group activities. Underline one category.

Never  | Once  | A Few Times  | 6-10 Times  | 10 + Times
1 (1)   | 2 (3) | 3 (13)       | 4 (7)        | 5 (4)

Since your participation in the BSF family program, please rate how often you would like to
initiate similar outdoor family group activities. Underline one category.

Never  | Once in a while  | As often as we can find time  | Unsure
1      | 2 (3)           | 3 (26)                        | 4

Please rate the likelihood that your family group will attend additional new BSF
family programs. Underline one number for each program category; consider the
program(s) you have already attended.

<table>
<thead>
<tr>
<th>Program</th>
<th>Not Very Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No Trace Family Camp</td>
<td>(5)</td>
<td>(4)</td>
<td>(4)</td>
<td>(2)</td>
</tr>
<tr>
<td>Questing and Geocaching</td>
<td>(3)</td>
<td>2</td>
<td>(3)</td>
<td>(6)</td>
</tr>
<tr>
<td>Cross-Country Ski Tour</td>
<td>(3)</td>
<td>2</td>
<td>(2)</td>
<td>(6)</td>
</tr>
<tr>
<td>Family Snowshoe Hike(s)</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>(6)</td>
</tr>
<tr>
<td>Earth Week Celebration</td>
<td>(1)</td>
<td>(3)</td>
<td>(4)</td>
<td>(8)</td>
</tr>
</tbody>
</table>
Please rate your confidence level in achieving the skills necessary to continue similar outdoor family group activities to those you completed during your BSF family program. *Underline one category.*

<table>
<thead>
<tr>
<th>No Confidence</th>
<th>Not Very Confident</th>
<th>Somewhat Confident</th>
<th>Very Confident</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (3)</td>
<td>4 (25)</td>
<td>5</td>
</tr>
</tbody>
</table>

How would you rate your current empathy for the outdoor environment?

<table>
<thead>
<tr>
<th>Very Low</th>
<th>Neatral</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>(1)</td>
<td>(3)</td>
</tr>
<tr>
<td>(10)</td>
<td>(1)</td>
<td>(4)</td>
</tr>
<tr>
<td>(10)</td>
<td>(1)</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Has today’s BSF family program affected your interest in spending time outdoors as a family group?

Please circle ONE of the following:   No (7)       Yes (22)   Unsure

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program? *Underline one category.*

| No (7) | Yes (17) | Unsure (3) |

Do you consider the resources/equipment useful within your family group? *Underline one category.*

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Somewhat Useful</th>
<th>Neutral</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 (6)</td>
<td>3 (2)</td>
<td>4 (18)</td>
</tr>
</tbody>
</table>

Do the resources/equipment allow you to initiate new outdoor activities with your family group? *Underline one category.*

| No (5) | Yes (18) | Unsure (3) |

Please rate the value you feel the overall BSF family programs bring to your family group. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (3)</td>
<td>4 (26)</td>
</tr>
</tbody>
</table>

Please rate the value you feel this BSF family program brings to your surrounding community. *Underline one category.*

<table>
<thead>
<tr>
<th>No Value</th>
<th>Low Value</th>
<th>Slight Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 (2)</td>
<td>4 (27)</td>
</tr>
</tbody>
</table>
Coded Qualitative Questions: Pre-Assessment

1. Perceived Interest in Program
   a. Learn new activity
   b. Lack of experience/difficulty initiating
   c. Accessibility/convenience of program

2. Perceived Value in Program and Staff
   a. Well-run program/facilities
   b. For families
   c. For the community

3. Program Influence
   a. Confidence
   b. Materials
   c. Activity Initiation

4. Other

Coded Pre-Assessment

If your family group has been involved in any program at the BSF, please provide additional comments about your experience(s) with the program(s) below.

2. Perceived Value
   a. Well-run program/facilities
      - only as class field trips- and the kids look forward to coming.
      - Superb- both education for the son and pristine grounds throughout
      - Great staff. Age appropriate. Great resource.
      - Love BSF-always fun.
      - Wonderful compassing & tree ID class
   b. For families
      - It is a fun time spending with the family outside.
      - School had a ropes/adventure night for whole family. Great experience.
      - My daughter & I came to a snowshoeing event last winter. Very informative and a good way to expose kids and adults to different activities.
      - Snow shoeing- fun, informative
      - I think it’s wonderful to have a program such as this. It not only brings the “family” closer together- but is very educational.
      - We love to come here. We attended the x-country ski day.
c. For the community
   - Great opportunity to let all utilize the BSF!

4. Other
   - My children visited BSF with Washington Elementary School, and my son is currently in summer school at BSF.
   - My children come to BSF though their school.
   - Participated in open houses. Wanted to do snowshoeing last year but already was filled.
   - School activities.
   - Only with Cub Scouts
   - High Ropes Course
   - School
   - Super- not TOO fussy but very interesting
   - We came to a school function (my son and I) that entailed environmental education, sledding, crafts, etc.
   - Ropes courses, school trips, Daisy Troop

Which family group member(s) influenced your decision to participate in today’s BSF family program?

1. Perceived Interest
   a. Learn new activity
      - I received a notice from McKinley School & thought it sounded like a lot of fun. Our kids have not skied before.
      - Children- X country skiing is new to us- trying something different.

   b. Lack of experience/difficulty initiating
      - Kids bringing home flyer and mom thinking this will be a good family activity. Besides I’m uncomfortable to take the kids camping only.

   c. Accessibility/convenience of program
      - My wife and I like to cross country ski and this was a good opportunity to expose our kids and see if they like it before spending $$ on equipment for them.

2. Perceived Value
   b. For families
      - My youngest son. He loves animals, science and learning about the outdoors.
      - Son- brought flyer home from school. Mom- read it and thought “this sounds like fun.”
      - All were excited to participate
      - Kids brought home info from school. We all thought it would be fun.
To enjoy some time outdoors, enjoying a winter day together. Plus we had just gone skiing on a BSF school trip. 
-Mysel, I thought it would be a great way to introduce my family to camping

On average, how often does your family group spend time outdoors together each month (for example: biking; birdwatching; camping; cooking; fishing; hiking; hunting)?

4. Other

- Quite a bit. We don’t have a cable/dish T.V. (or Playstation, Xbox, etc.) or internet so we are outside a lot especially during summer- biking/playing or whatever 😊
- Not enough at all. It’s harder to keep their interest the older they get.
- 4-5 times per month.
- lots- more on a agricultural experience. Maybe 3 hours/day…feeding cows, gardening, hanging out at a pond, taking a tractor ride, etc.
- bike-almost daily. Camping-at least 1-2 times/yr. Hiking- 1/mo.
- a few times (3-4)
- ~ 7x per month
- Approximately 200+ hours/month
- We take walks, and have fires in our fire pit just about weekly.
- Hard to quantify- 12 times a month as a family. Tenting in the backyard.
- 2x week = 8x month
- 30-60 hrs. per month
- 10 hrs/week, 30 hours
- Very little under 15%
- Hunting, Biking, Fishing, Hiking…Many times a week
- 2 or 3 times
- 2-3 hours
- Four times a month
- 2-4 “not enough!”
- 6 hrs
- Summer everyday. Winter 1-2x month (everyday through windows)
- 3-4x week- except winter
- Not as often as I would like. More in summer.
- Couple times/week
- At least 2x/week
- Biking & walking every day spring, summer, & fall. Winter maybe every other day.
- 40% in winter. 80% in fall/spring/summer.
- Often over ½ days. Winter: seldom.
- More in summer- 3-4x’s/week. Trying to do more in winter.
- 2 times per month.
- As often as we can. Camping, biking, sledding, fishing, etc.
- Try to get out on walks, bike ride, hikes, sledding, snowshoeing, and bird watching with grandparents. Spring break- Utah to hike.
- Every day with reasonable weather.
- 10+ hours.
- 4 times.
- Winter 8-10x/month. Summer 20x/month or more.
- Quite a bit.
- Winter- 2/week. Summer/Spring/Fall- 5/week.
- 2-3/week.
- At least once a week.
- Everyday during late spring, summer and early fall, less during the winter.
- Summer 10 times.
- 15-20/s month
- Winter- much less- maybe 2x/month. Spring summer- much more- every weekend & a couple of days a week.
- I would guess on average about once/week. More in warm weather, less in cold.
- Few times.
- Spring, Summer, Fall- every chance we have. Winter- maybe 2x a month.
- Daily- shorter in winter months longer in summer months. Summer may spend an entire weekend outside.
- A few hours a day
- Fishing, camping
- Family- 1x week. Girl Scouts- monthly +
- About once a month
- Daily in summer. One day- two days in winter.
- Every weekend if possible plus after school.
- 5x/month
- 5 times a month, maybe as high as 10.
- Daily when weather is not too cold
- 1-2 times a month (1-2 hours at a time)
- 8-10 times/month
- Very often depending on the month
- Daily
- 3 or 4x/month
- At least weekly, about 6x
- 1x/month
- Walking- winter. Summer- walking, swimming, biking.
- Every day.
- In winter, 4-8 times a month, summer almost daily.
- 8 hours
- 8 hours
- Almost daily during summer. Several days/week spring & fall. Maybe twice/month during winter.
- Lots of biking in the summer.
- 3 or 4 hours
- 4 weekends
- Almost none altogether
- We try to do many family activities outdoors. In summer we are outdoors daily and in winter we try to do outside activities once a week (at least!).
- We bike & camp 2-4 weekends per month April-October. We cook out almost every night in the summer and occasionally in winter. We go sledding.
- 10-14 days
- Not too often in the winter. Maybe a handful of times through the winter months. More often in the spring, summer & fall- probably about once a week.
Please provide additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

1. Perceived Interest
   
   b. Lack of experience/difficulty initiating
      - Usually initiating is the most difficult part. Once we are outside, everyone has a good time. Our family is into biking (Standing Rocks- Stevens Point Area) and last winter we bought skis (Nordic Mt., Granite Peak) for our family.

   c. Accessibility/convenience of program
      - I like it when it is planned out for me- I’m a single parent and don’t have time for planning.
      - Organized, family events are easier to get going.
      - Often do activities in cooperation w/scouting & church groups.

2. Perceived Value
   
   b. For families
      - Trying to get some outdoor exercise.
      - Cross Country Skiing is great activity for the school forest. Good exercise.
      - I’m a student at UWSP majoring in Environmental Ed., so getting my children involved in the outdoors is very important. We live close to the Green Circle Trail, so we’re on that hiking, biking all year round. We look at different trees and try to watch for birds. We have a hawk’s nest close to our backyard, so we watch that daily in the summer. We also take them fishing a lot.

4. Other
   
   - Hiking- exploring nearby parks, gardens. Activities learning about animals.
   - We often do it while on vacation by reading tourist guides.
   - We enjoy biking, swimming, hiking.
   - We enjoy hiking and fishing and just started camping this year. We would like to camp in different National Parks in the future.
   - We go to my husband’s Aunt’s house in Tomahawk every summer, and that lets the kids try fishing and riding in boats and canoes- things we don’t do at home. Whenever we try something outdoors, my kids usually love it!
   - We often have a backyard fire. It’s one of the kids’ favorite things to do. The kids ask us as often as we can to do that. We also make a point to spend a day at Sunset Lake as often as we can. The kids as us, “When can we go to Sunset Lake again?” (My kids typically do not watch much TV and we do not own video games-conscience choice)
   - No or inexpensive equipment is a plus. Fall/winter climate & scenery is preferred.
   - We go to the state parks a lot. We go cross-country skiing on Green Circle Trail.
   - Try to spend time w/local outdoor areas such as: Iverson, Schmeeckle, BSF.
- We go biking, swimming
- I have to push the kids to do activities other than just playing outside, but after they go to the program/activity they usually have positive feedback.
- Would love to see X-country skiing as a monthly or bi-monthly event.
- Our family is extremely active with outdoor activities all throughout the U.S. since my son’s birth.
- Our outdoor experiences are something we always look forward to, especially biking on the Green Circle. We also like going to the river to see the ducks & ride along it.
- Family is very willing to try new activities. We would like to do more in winter.
- Green Circle- biking, walking. Downhill skiing.
- We like playing/sledding out on our family’s land, we enjoy Iverson Park.
- We like to get outside- try to walk daily.
- Camping, hiking, sledding.
- We love to bike, find new places to fish & swim. We camp and hike new places.
- It’s usually fishing!
- Sledding couple of times a season. Playing in yard 2-3 times a week. In summer kids play soccer, have swim lessons. Boating, swimming and fishing almost every weekend in summer.
- We like summer activities because it’s not so hard to get ourselves outside. The cold of the outside stops us. Backyard, around the neighborhood, biking, to the swimming pool.
- We try to expose our kids to lots of different activities. We go camping, fishing, biking, hunting, hiking, swimming frequently (15-20/x month). We enjoy these activities mostly throughout the whole state of Wisconsin for variety.
- The majority of time in winter is sledding, some just playing in the snow.
- Summer, spring & fall lots of walking, biking, camping. Some sports such as soccer & swimming.
- Infrequently; usually when we go to family that have forests on property.
- Not easy- one of us doesn’t like cold.
- Sometimes hard to get the kids & dad outside when it’s cold. We hike in the summer w/grandparents. My dad is a botanist (wildlife esp) so he takes us on plant walks.
- We try to spend as much time outdoors as we can, and no one in the family objects!
- We enjoy hunting, fishing, hiking, biking & camping.
- We enjoy campfires at home (2x month) in nice weather. We enjoy swimming at pools, water parks & beaches. We enjoy walking the dog at the dog park. We enjoy x-country skiing around home & at the dog park. We enjoy riding bikes & walking on the Green Circle. We enjoy sledding at Iverson (2-3 times each winter). We enjoy ice skating at Willett & Goerke (6-8 times each winter).
APPENDIX U

Coded Qualitative Questions: First Post-Assessment

Coded Post-Assessment #1

Please rate your family group’s overall satisfaction with today’s BSF program.
How often do you initiate similar activities to today’s program with your family group?
Please rate the likelihood of how often you will initiate similar activities to today’s program with your family group in the near future.

Please provide additional comments to support your responses for questions 1-3.

1. Perceived Interest
   a. Learn new activity
      - The kids really enjoyed learning to ski. They are already asking to do it again. This is the type of activity that our family tries to do as often as we are able to.
      - We brought friends today that haven’t skied. The friends enjoyed & would like to ski again.
      - We do family activities very often but we have never been cross-country skiing and winter activities are a little new to us (we just moved here from the South). We loved the skiing and will do it again as soon as possible.
      - We learned a lot of new ideas. Bear bag- rope tossing. Soap on dish pot. Kids got to do some hands on activities. I’ve been afraid to camp alone w/kids and this gave us a group to do it with.
      - With all our new ideas (and new backpack and supplies) we are anxious to use the information and techniques we have learned.
   b. Lack of experience/difficulty initiating
      - Winter activities always need a little help. Summer- no problem!
   c. Accessibility/convenience of program
      - We always look for fun & educational opportunities. It was a bonus that it was free!
      - Free & planned- love it!

2. Perceived Value
   a. Well-run program/facilities
      - Well laid out- very interesting.
      - Excellent program
      - It was great! Everybody was so nice and also very helpful!
      - I think this was a really well run program. It was very organized and the staff was extremely helpful.
b. For families
   - I like the fact that the program teaches respect for nature, teaches valuable skills at an adult and child level and helps to bind our family closer.
   - We try to expose our kids to lots of different activities and continue the activities that we all can enjoy together.
   - My oldest daughter and I had a great time. We would love to bring out 4 year old daughter to the next event. She has come along on BSF school trips.
   - We haven’t skied as a family. As our children age, we’ll ski more.

c. For the community
   - It is nice to see the schools promote family involvement.

3. Program Influence

b. Materials
   - We appreciated the training in Leave No Trace Behind.
   - Now that we have a compass maybe more. Can’t do geocaching the way it was done here because don’t have equipment.
   - I am definitely interested in more info on activities like this.

c. Activity Initiation
   - Where able- we try to go to local parks- state, local, national.
   - Family had fun, hope to do it again soon.
   - Now that we have more knowledge we will do this type of activity more often.
   - We’ve already talked about setting up a Questing-type situation in our neighborhood for all the neighbor kids.
   - Time is an issue but having this experience increases the probability that we will make time.
   - This was cool. We will do more of this.

4. Other
   - We used to visit programs at Schmeeckle and Jordan Park.
   - We are very active in the out of doors. Bike, walk, swim, kayak.
   - This is interesting, but w/the age of our daughter (3) it makes it difficult to keep their attention.
   - If we get to know about some outdoor family activities beforehand, we will surely come.
   - Advertising through the school (K-12) was a great idea. You may also want to advertise at the University though Faculty/Staff & Students “Message of the Day.”
   - We had a great time today. Due to other commitments, we got here later in the day so we didn’t have a lot of time to do/participate in both activities.
   - There was room on either side of the trail when one track or the other became a rut and uncomfortable to push through.
   - It was fun- wish they had a longer trail- we did yellow & pink trails.
   - Now that we have done this, next time we may invite others to join us (friends).
- We had a great time. Even better, we were physically active.
- We had an awesome time!
- The boys enjoy doing outdoor activities.

Has today’s BSF family program affected your interest in spending time outdoors as a family group? Please comment on your response.

1. Perceived Interest
   a. Learn new activity
      - Great to know you have this. We need to be exposed to new outdoor activities.
   
   c. Accessibility/convenience of program
      - We enjoy doing outdoor activities. We enjoyed being able to try out skiing and snowshoeing for free.

2. Perceived Value
   a. Well-run program/facilities
      - I commented often about how beautiful it was out there. How peaceful.
   
   b. For families
      - It was fun doing this activity with my son spending time outdoors.
      - We like to be active and outdoors. It is an added bonus to spend time together learning some new physical activity.
      - We had a blast & very good exercise.
      - I have always enjoyed outdoor activities. This just reinforces the fact that the whole family can enjoy them.
   
   c. For the community
      - Preservation for the next generation
      - It reminds us of our impact and gave us principles to follow.
      - This teaches all of us to work as a team and enjoy nature and each other.

3. Program Influence
   a. Confidence
      - I don’t camp or cook out w/the kids, but I think I’m more comfortable doing it.
      - Involvement in a program like this motivates one to respect and enjoy the natural environment.
      - Yes!
      - Definitely, today’s activity gets us thinking about something other than T.V. & video games!
      - Yes
      - (Yes)...Absolutely!
- Definitely increases enjoyment therefore increases empathy.
- Loved it- we had a blast.
- Sure.
- Yes
- Yes

b. Materials
- It expanded our understanding of winter time activities.

c. Activity Initiation
- We are thinking of camping in the back country.
- I would like to try camping with my family now, although I think I would try a cabin.
- Any time we spend time outside gives us more respect for our environment & makes us want to spend more time together AND outside.
- It was so much fun and gives me incentive to try and do more winter sports. I had always wanted to try cross-country skiing but it is difficult to coordinate if you don’t have skis- this made it so convenient and easy to manage. We REALLY appreciate it! And are considering trying to get some skis for ourselves!
- We now have a new activity to do outdoors.
- This is a great way to get outdoors during winter.
- We might buy snowshoes.
- We will be purchasing snowshoes so we can go more often.

4. Other
- We (kids) LOVE BSF!
- Help us to be more aware of our surroundings.
- We currently take great interest in our outdoor environment.
- We spend a lot of time outside already.
- It tires them out!! 😊
- Already empathetic towards environment and teaching children to appreciate nature as well as respect it.
- No. I already have some but I’ve always liked having trees of woods and grass rather than cement except for the vehicles sakes.
- It was very fun.
- The girls liked to smell the outdoors.
- When you live in Wisconsin, you have to go with the flow with all the elements of weather- either you love it or hate it.
- We love being outdoors and spend lots of time as a family enjoying the time together either on our property west of Stevens Point or up north (Hurley, WI area).
- No, already had strong empathy.
- We often think it will take more time to have fun; we have lots of plans for today (!) but stuck with our decision to come here 😊
- Already high
Please rate your confidence level in achieving the skills necessary to continue leading similar outdoor family activities to today’s BSF program.

Please rate the value you feel that today’s BSF family program brings to your surrounding community.

Please provide additional comments to support your responses for questions 8-9.

1. Perceived Interest
   a. Learn new activity
      - Nice opportunity to try skiing when haven’t before.

   b. Lack of experience/difficulty initiating
      - I feel I need more practice but it was a good start.

   c. Accessibility/convenience of program
      - BSF is a great opportunity for families that would not normally take the initiative to do outdoor activities together…and the fact that it’s no expense allows everyone to participate.
      - Gives families a chance to get out of the house and enjoy a fun program right in our own town.
      - Cross Country skiing is relatively easy for anyone to try and it should be encouraged in any family. It is an investment personally and it’s nice to have no cost programs and usage available.
      - Everything we needed was provided. We didn’t have to worry about not having the right things.
      - Help doing things as a family and not having the high expense of trying things.

2. Perceived Value
   a. Well-run program/facilities
      - The program exceeded my expectations.
      - I just can’t express how wonderful an event this was! The staff was so helpful & enthusiastic, the setting is gorgeous as is the whole facility. I am really so grateful for this wonderful opportunity to try a new outdoor activity with my daughter that it would have been difficult to do otherwise.
      - Staff/volunteers very helpful in demonstrating & answering questions.

   b. For families
      - Stressing the importance of the environment and protecting it is a very important value to instill in our children. This is especially important for children who play inside all the time and don’t know how to enjoy the outdoors.

   c. For the community
      - Programs like this one enhance the quality of life in our community. This program teaches us to enjoy the natural environment of our area.
- Making family friendly outdoor activities available increases the communities’ awareness of outdoor resources and issues.
- I think it shows families how fun the outdoors can be. And if we don’t take care of it we would not be able to do things like we did today. Keeps us in touch with the outdoor environment around us.
- There is very little for kids to do in Stevens Point.
- The community programs are of great value to the community & to the school district & school forest program.

3. Program Influence
   
a. **Confidence**
   - Each outdoor experience enhances our confidence- the friendly, helpful and very knowledgeable staff also provided wonderful support.
   - I had no idea how to use a compass before this weekend. And I feel much more confident cooking outdoors now.

b. **Materials**
   - We learned the first time about GPS orientation. We might use this if we go hiking in North Wisconsin.
   - I learned a lot of new things now applying them will be the challenge.

c. **Activity Initiation**
   - Setting up a Quest does not seem too difficult- very achievable!
   - Programs like this help get my family outdoors- organized events help us initiate further outdoor activities.

4. **Other**
   - We love being out in nature.
   - I enjoy many outdoor activities and try to include my kids and others through scouts, school, etc.
   - Awareness always helps.
   - It was great seeing how many families were out here.

Please provide any additional comments about your experience initiating outdoor, family-oriented activities with your family group (e.g., other activities, how often, where you complete these activities).

1. Perceived Interest
   
b. **Lack of experience/difficulty initiating**
   - More difficult to initiate if one member of family does not enjoy.
c. **Accessibility/convenience of program**
   - This made it easy for us to experience this type of activity. I would not have done this on my own.
   - The opportunity to try for free is great. Offers opportunity to people who may NOT otherwise have.

2. **Perceived Value**

   b. **For families**
      - Now we have an experience that the kids can compare to future activities.
      - It may seem like a lot of work to get everything together and get started, but once you’re all out there, it’s all worth it. There are the times our kids are going to remember! Time spent having fun together! Thank You!
      - Great for the kids and adults alike.
      - This was great! We need to expose more families to these things!
      - This is a great way to get out family involved in outdoors activities. Thanks!

   c. **For the community**
      - I think the more opportunities there are like this, the better!
      - Excellent program that people can enjoy this is in the community. I didn’t know this was here.
      - Too bad there wasn’t enough skis to go around- but in that result- this was a good turnout! Then 😃!! I will refer this program to friends & clients.

3. **Program Influence**

   c. **Activity Initiation**
      - I would like to try dry food at home now. Maybe next time, the group could cook a scratch lunch from their own dried veggies (vs. prepared package).
      - I think I will try to initiate a camp out for my family this fall- in a cabin. I don’t think I would have tried it until this weekend.
      - It’s more challenging to do outdoor tasks in the wintertime. Being exposed to cross-country skiing can now be added to our activities.
      - We want to do it as often as possible.

4. **Other**

   - Hiking and camping in state parks and nat. forest.
   - We initiate these activities mostly in the summer. We see what Visitor Centers and Parks have to offer. (A few activities every summer.)
   - Biking 4x week Green Circle Trail. Swimming 7x week Backyard. Horseback riding 1x week Vesper, WI. Play 7x week Backyard/parks. Walking 3x week Stevens Point.
   - We camp with other families ~ 1 per year. We picnic/hike for the day.
   - Go to state parks. Ski on Green Circle Trail. Summer vacations are usually to National Parks- this year Mammoth Cave, last year Yellowstone, Teton & Glacier.
   - We do hiking, swimming & biking few times.
- Outdoor camping (summer-winter) in Eau Claire, sledding at Iverson & Eau Claire, orienteering- Boston School Forest & Eau Claire. We do lots of camping as a family and going more activities like skiing, snowshoeing, biking, etc.
- Last year we tried to use the outdoor skating rinks. We use plowed snow hills for sledding. This year we did not sled or skate as much but the children & we shoveled.
- During the spring & summer we do a good amount of outdoor activities, but not as much in the winter, in part because we don’t own the equipment. And also because by the time I get home from work it is dark. We would like to do more outdoors but often are limited by available time.
- With young kids, we try to make outdoor activities fun so the kids look forward to doing them.
- Sledding at Iverson- weekly. Hiking all summer. Going to the local parks weekly.
- We will continue to enjoy the outdoor activities we have come to enjoy. Walking, biking, snowmobiling, skiing, ATV-ing, sledding.
- We hike, fish a lot- camp, too.
- We do lots outside together! All year long!
- We do a lot outdoors- not as often in the winter, but will do more as our children get older.
- This part of WI seems very- hunting, fishing, snow-mobile oriented- had to find “quieter” family activities that don’t require tons of equipment.
- Hiking at Jordan Park or Green Circle, mostly in summer.
- We camp & bike 2-4 weekends per month April-October. We sled, hike, cook outside, etc.
APPENDIX V

Coded Qualitative Questions: Second Post-Assessment

Coded Post-Assessment #2

Since your participation in the BSF family program, have you gained interest in similar outdoor family group activities?
Since your participation in the BSF family program, please rate how often you have initiated similar outdoor family group activities.
Since your participation in the BSF family program, please rate how often you would like to initiate similar outdoor family group activities.

Please provide additional comments to support your responses for questions 1-3.

1. Perceived Interest

   c. Accessibility/convenience of program
      - Organized events force us to set aside the time to do it. And usually it’s more fun in a group.
      - The event renewed an interest in getting our kids out skiing, but we need to buy equipment for them. We will definitely do more as they get older.

3. Program Influence

   b. Materials
      - We are an active family already- but loved the chance to go to BSF as a family- both kids have very much enjoyed their elementary school field trips there.
      - We are an active family. We tend to participate in a lot of outdoor activities. I did appreciate the opportunity to bring my children’s friends. While we own skis/snowshoes, our children’s friends don’t.

   c. Activity Initiation
      - My husband set up a couple geocaches in our neighborhood.
      - Your program gave us more ideas for what to do during wintertime! Thanks- this is a great program!
      - The program was wonderful. It introduced us to cross-country skiing to the point that we desire to make it a regular part of our lives. We have already looked into obtaining some equipment of our own.
      - This outing actually encouraged my husband and I to purchase x-country skis. We are looking into a rental program for the kids.
      - Our kids really enjoyed snowshoeing. It’s just one of those things that if it’s not too cold and we have time, we’ll do more of it. But this would be something we would make time to do.
- Our schedule is already so full that finding time is difficult. But we want to make the time occasionally to get outside and do things together thanks to the fun time we had snowshoeing. We even bought snowshoes and tried them out in the backyard.

4. Other
- We spend a lot of time outdoors canoeing and fishing in small lakes.
- We weren’t able to read the GPS properly- our mistake- and gave up on the activity. I would have needed my reading glasses & didn’t have them with me.
- We always try to get outside at least once a day to enjoy nature in some way.
- #1- but our interest level hasn’t risen- we are always interested.
- We enjoy doing activities as a family.
- We had a great time cross country skiing.

Has today’s BSF family program affected your interest in spending time outdoors as a family group?
Please comment on your response.

2. Perceived Value

b. For families
- I find it enjoyable spending time w/my family outside. Activities like these give us a purpose, instead of just “walking around.”
- It reminded us how fun it is to do things outdoors as a family.
- We value our time together, enjoy the environment & seek ways to stay fit.

3. Program Influence

a. Confidence
- Yes, I have more confidence bringing my children camping. I think it raised their empathy for the outdoor environment.
- It reinforces my deep empathy for the outdoors.
- Yes…we try to preserve nature as best we can.
- Anything that allows me to spend more time outside influences my feeling towards the outdoors.
- It reinforces our love for the outdoors and our commitment to being good stewards of the outdoor environment.
- Yes
- Yes

b. Materials
- Yes- but it was already pretty high to begin with. This program introduced us to many more options during winter time.

c. Activity Initiation
- I might consider getting a water filter and trying to camp in remote areas.
- As our kids get a little older and find this activity easier to do, we will be doing a lot more snowshoeing.
4. Other
- Already had interest.
- We love to spend time outdoors, our interest hasn’t changed.
- No, we already have great interest.
- Already spend a lot of time outdoors as a family.
- Already do many family outdoor activities.
- Always have liked doing outdoor activities with family.
- Enjoyable.
- We enjoy participating/learning/activities

The following questions (8-12) ask you to rate the resources/equipment that were distributed to your family group at the end of your BSF family program.

Have you used the resources/equipment that were distributed to your family group at the end of your BSF family program?

Do you consider the resources/equipment useful within your family group?

Do the resources/equipment allow you to initiate new outdoor activities with your family group?

Please provide additional comments to support your responses for questions 8-10.

3. Program Influence
   b. Materials
      - Really appreciated the smaller snowshoes for my 4 and 6 year olds. They found them very easy to walk in.
      - It provided the opportunity for our children to “try” new experiences without the large cost sometimes involved in the activities.

   c. Activity Initiation
      - We used the compass for hiking

4. Other
   - We don’t have skis.
   - Had other compass before
   - We spend time outdoors but not where orienteering is in question.
   - We don’t have skis we do a lot of snowmobiling & skating.
   - When we got home, anything we brought home was put to the side for “later,” including this survey. Again the business factor.

What do you find the most useful about the resources/equipment?

1. Perceived Interest
   a. Learn new activity
      - Gets us outdoors doing something new.
      - List of cross country ski areas.
c. Accessibility/convenience of program
- Free.
- It was fun to try it- without bringing equipment
- Along with my comment above (smaller snowshoes), ease of putting snowshoes on.
- Free

2. Perceived Value

a. Well-run program/facilities
- Beauty- cleanliness- mutual enjoyment- a place where the son is the resident expert (!)
- They know how to use it, and explain it well.
- Most useful was the instruction on how to use our own GPS to set waypoints.
- There was lots of equipment, and the staff was very friendly.

b. For families
- Anything that gets families working together and particularly doing these outdoors is a good thing!
- Family time outdoors.

3. Program Influence

b. Materials
- Compass, backpack, water bottles
- It was a wonderful collection of things for remote camping.
- Don’t have to share equipment now. Easy to use.
- You have all sizes.
- We did not know how to or have equipment to cross-country ski. The resources and equipment enabled us to learn and appreciate cross-country skiing.
- Thinking about the snowshoes we used at BSF affected our later snowshoe purchase.

What do you find the least useful about the resources/equipment? Please provide comments, suggestions for improvement.

2. Perceived Value

a. Well-run program/facilities
- Nothing, I think it was all great!
- Nothing, they did a very nice job.

4. Other
- Nothing
- Restricted hours for the general public- but it’s understandable.
- A little hard to get [snowshoes] off when you’re cold!
- The night was perfect.
- Anything extra that’s a take-home thing is at high risk of being lost or quickly forgotten.
- Not enough for all who attended.

Please rate the value you feel the overall BSF family programs bring to your family group. Please provide additional comments to support your response for question 13.

1. Perceived Interest
   a. Learn new activity
      - It’s an easy way to introduce our children to outdoor activities for which we don’t have equipment and a different site to pursue those interests.
      - Fun- something new & different than normal activities.
      - Once you set out that first time, it sort of breaks the ice and opens your eyes. You think, “Yeah, we can go there once in a while.”
   
   c. Accessibility/convenience of program
      - The actual space at BSF is amazing and it’s great to be so close to a resource like this!
      - It’s a great way to get the kids to try new things before buying expensive equipment, and it’s a wonderful environment!

2. Perceived Value
   a. Well-run program/facilities
      - I thought it was an excellent program.
      - As a destination of reliable tranquility & beauty.
   
   b. For families
      - BSF family programs = fun outside w/family
      - We hope to take advantage of more programs, and thus the value of BSF programs will increase.
   
   c. For the community
      - Even our exchange UWSP students had fun.

3. Program Influence
   
   b. Materials
      - Everybody enjoyed it and we learned new things.
4. Other
   - Gets people out.
   - We have our own skis and would have gone elsewhere.

Please rate the value you feel this BSF family program brings to your surrounding community. Please provide additional comments to support your response for question 14.

1. Perceived Interest
   c. Accessibility/convenience of program
      - Fun family oriented programs & free.

2. Perceived Value
   a. Well-run program/facilities
      - If no other value, to illustrate to the children the beauty of a litter-free setting.
   b. For families
      - I think most families would really enjoy the program.
      - Encourages families to spend time, get outside & enjoy snow (2 UWSP students who are exchange students and their first time skiing, too).
   c. For the community
      - More people need to be aware of these programs! I told other parents about our day…they were unaware of them program & would have come out if they had known.
      - I wish more people knew & low-income families had transportation & a way to find out about the programs.
      - The programs are a great way to connect the community to the school, to get people involved in outdoor recreation, and to increase their awareness of the environment which all leads to a greater sense of community and potentially to a greater interest in environmental issues that affect us all.
      - Not only is BSF great for school groups to learn and experience, but also for scouting groups and other community groups.
      - I think it’s great for the community. I thought there would have been a lot more people there. But to keep these kinds of programs going, I know our family would come out as often as we can to support them. I would hope others would too, for this is important.
      - It influences other groups to get involved and open things to the community.

4. Other
   - Don’t think you are getting “non-choir” members to participate.
   - I didn’t even know you were here.
   - Thank you.
APPENDIX W

University of Wisconsin-Stevens Point Student Research Fund Grant

APPLICATION DEADLINE: 9/17/07

TITLE OF PROPOSED PROJECT OR STUDY:
LEAVE NO FAMILY INSIDE: IMPACT OF BOSTON SCHOOL FOREST FAMILY PROGRAMS ON VARIABLES OF ENVIRONMENTAL SENSITIVITY

SUBMITTED BY: Emily A. Hill

DEPARTMENT & COLLEGE:
   Environmental Education/Interpretation, College of Natural Resources

STATUS: Graduate Student

BUDGET SUMMARY

DATES OF PROJECT: 7/07-7/08

A copy of a budget statement must be on file during the progress of each project that is operating under a grant administered by the university. Detail specifically the purposes for which funds are requested and carefully identify specific categories and priorities in the event partial funding is necessary.

EXPENSE BUDGET

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Project Budget</th>
<th>Amount Requested From SRF</th>
<th>Matching/Personal Funding</th>
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</thead>
<tbody>
<tr>
<td>1. Travel</td>
<td>$157.44</td>
<td>$157.44</td>
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<tr>
<td>2. Services and supplies</td>
<td>$348.50</td>
<td>$342.50</td>
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<td>3. Capital</td>
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<td>$0.00</td>
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<td>4. TOTAL EXPENSES</td>
<td>$505.94</td>
<td>$499.94</td>
<td>$6.00</td>
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(1+2+3=4)
**TRAVEL DETAIL.** UPDC WILL FUND THE LOWEST RATE ALLOWABLE PER MILE FOR PRIVATE AUTO USE. For the current rate, call Travel Administration, x2255 (the rate for mileage is .32 or .425 with a non-availability slip).

<table>
<thead>
<tr>
<th>Total</th>
<th>Amount</th>
<th>Matching/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>Requested</td>
<td>Personal</td>
</tr>
<tr>
<td>Budget</td>
<td>From SRF</td>
<td>Funding</td>
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**GROUND TRANSPORTATION**

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<thead>
<tr>
<th>Mode</th>
<th>my car</th>
<th>84 miles x .32 cents/mile</th>
<th>$26.88</th>
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<tbody>
<tr>
<td>From</td>
<td>UW-SP campus</td>
<td>To Boston School Forest family programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* 28 miles round-trip, for 3 program events total</td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Mode</th>
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<th>$53.76</th>
<th>$0.00</th>
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<tbody>
<tr>
<td>From</td>
<td>UW-SP campus</td>
<td>To Boston School Forest for meetings for family programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* 28 miles round trip, two planning meetings per program event, for 3 program events total</td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Mode</th>
<th>my car</th>
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<tbody>
<tr>
<td>From</td>
<td>UW-SP campus</td>
<td>To Collect and distribute family program media in Stevens Point and Plover Areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* 80 miles round trip, for 3 program events total</td>
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</table>

**TOTAL TRAVEL**

| $157.44 | $157.44 | $0.00 |

**SERVICES AND SUPPLIES DETAIL**

<table>
<thead>
<tr>
<th>Budget</th>
<th>From SRF</th>
<th>Funding</th>
</tr>
</thead>
</table>

Postage

Library Database Search

Supplies (itemize)
(attach additional page, if necessary)

50 Professional Business Card Magnets (Vista Print, lump sum)  $20.00  $14.00  $6.00

Reference Packets and Handouts for use during MEEC Conference Presentation  $4.50  $4.50  $0.00
(.03 per printed page, 150 pages total)

Publication of “Leave No Family Inside” Guidebooks For MEEC Conference Presentation participants  $324.00  $324.00  $0.00
(.03 per printed page, about 120 pages, 90 copies)

**TOTAL SUPPLIES AND SERVICES**

$348.50  $342.50  $6.00
TIMELINE INSTRUCTIONS

1. Enter the title of an activity and a brief description of that activity.

2. Enter the planned date of initiation and completion of that activity.

3. If there is more than one activity, list each separately in chronological order, with the appropriate dates.

**TIMELINE**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PLANNED DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwest Environmental Education Conference (MEEC) Presentation of “Leave No Family Inside” Boston School Forest family programs, and distribution of associated Guidebook to presentation participants (Country Springs Hotel in Stevens Point, WI)</td>
<td>10/19/07</td>
</tr>
<tr>
<td>Meeting with Boston School Forest Staff: 1/12/08 Ski program</td>
<td>12/17/07</td>
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<tr>
<td>Meeting with Boston School Forest Staff: 1/12/08 Ski program</td>
<td>1/7/08</td>
</tr>
<tr>
<td>Posting of Media around Stevens Point/Plover for Ski program</td>
<td>12/26/07</td>
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<tr>
<td>Ski program (at the Boston School Forest)</td>
<td>1/12/08</td>
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<tr>
<td>Meeting with Boston School Forest Staff: 2/5/08 Snowshoe program</td>
<td>1/14/08</td>
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<tr>
<td>Meeting with Boston School Forest Staff: 2/5/08 Snowshoe program</td>
<td>1/28/08</td>
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<tr>
<td>Posting of Media around Stevens Point/Plover for Snowshoe program</td>
<td>1/22/08</td>
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<tr>
<td>Snowshoe program (at the Boston School Forest)</td>
<td>2/5/08</td>
</tr>
<tr>
<td>Meeting with Boston School Forest Staff: 4/22/08 Earth Day program</td>
<td>3/17/08</td>
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<tr>
<td>Meeting with Boston School Forest Staff: 4/22/08 Earth Day program</td>
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<tr>
<td>Posting of Media around Stevens Point/Plover for Earth Day program</td>
<td>4/1/08</td>
</tr>
<tr>
<td>Earth Day program (at the Boston School Forest)</td>
<td>4/22/08</td>
</tr>
</tbody>
</table>
VITA SUMMARY

NAME: ______ Emily Allison Hill

MAJOR: ____ M.S. in Natural Resources- Environmental Education and Interpretation

Background Courses Taken in Support of this Research:

Natural Resources 501: Foundations of Environmental Education I (Fall 2006)
Natural Resources 568: Oral Interpretation Methods (Fall 2006)
Natural Resources 750: Research Methods in Environmental Education/Interpretation (Fall 2006)
Natural Resources 794: Graduate Seminar (Fall 2006)
Natural Resources 799: Thesis (Fall 2006)
Natural Resources 502: Foundations of Environmental Education II (Spring 2007)
Natural Resources 569: Interpretive Media (Spring 2007)
Natural Resources 795: Graduate Seminar (Spring 2007)
Natural Resources 799: Thesis (Spring 2007)

1. Provide a short, professional description of yourself including an indication of how this research project will benefit you personally and fit into your future career goals.

I received a Bachelor of Art’s Degree in Psychology and Certificate in Environmental Studies from the University of Wisconsin-Madison in May 2005. Currently, I am a full-time graduate student pursuing a M.S. in Natural Resources with a focus of Environmental Education and Interpretation within the College of Natural Resources at the University of Wisconsin-Stevens Point. Members of my graduate committee include my advisor Dr. Brenda Lackey and Dr. Daniel Sivek in the College of Natural Resources, as well as Dr. Paula DeHart in the College of Professional Studies at UW-SP.

Karen Dostal, Director of the Plover, WI Boston School Forest and Environmental Education Coordinator for the Stevens Point Area Public Schools serves as another member of my graduate committee. My masters thesis project is entitled, “Leave No Family Inside: Impact of Boston School Forest Family Programs on Variables of Environmental Sensitivity.” I work closely with Karen Dostal and other Boston School Forest staff and facilitators in developing, advertising, implementing, and assessing this first series of family programs hosted at the Boston School Forest throughout the year from July 2007- July 2008. Also, I will be presenting information about the first two of five programs during a concurrent session held at the Midwest Environmental Education Conference in Stevens Point, WI, on October 19th, 2007. This first year of Leave No Family Inside (LNFI) family programs at the Boston School Forest is being funded in large part by grants awarded from the Wisconsin Environmental Education Board and
Community Foundation of Portage County. These grants allow the programs to remain free to the public, and provide a budget of free materials for families in attendance at each program. I have been hired part-time by Karen Dostal of the Stevens Point Area Public Schools as the LNFI project consultant, and am paid for my time in developing and implementing the programs during the 2007-2008 year.

This research project, including my professional presentation of it and associated Guidebook distribution during the MEEC Conference, will aid in the success of my master’s thesis work here at UW-SP. Upon graduation in May 2008, I look forward to working in a similar position to that of Karen Dostal, serving as an Environmental Education Outreach Coordinator with schools and the public. Currently, the practice in preparing Guidebooks for MEEC participants, as well as continuing to develop, implement and assess LNFI programs at the Boston School Forest allows me to make further connections within the admirable network of environmental education and interpretation professionals of whom now I am a part.

2. List previously awarded grants of any type in the past five years.

1. **Community Foundation of Portage County**
   (Funding provided by: Ward & Ethel Cable Fund, Environmental Endowment Fund of Portage County, and the Community Grant Fund)

   Grant Author: Karen Dostal
   Project Title: *Leave No Family Inside, Bringing Families Together in the Outdoors*
   Awarded: May 2007, **$1,300.00**

2. **Wisconsin Environmental Education Board**

   Grant Authors: Karen Dostal and Emily Hill
   Applicant: Stevens Point Area Public Schools
   Project Title: *Leave No Family Inside, Bringing Families Together in the Outdoors*
   School Forest: Boston School Forest
   Awarded: May 2007, **$9,158.00**
APPENDIX X

LNFI Program Participant Distribution and Assessment Participation 2007-2008

Leave No Trace Family Camp 2007

Family Groups (total attending = 8, total participation n = 8)
Adults (n = 9)
Children < 18 years old (n = 17)

Pre-Assessment only (n = 1)
Pre-Assessment and Post-Assessment #1 (n = 5)
Pre-Assessment, Post-Assessment #1, and Post-Assessment #2 (n = 2)

Geocaching and Questing For Families 2007

Family Groups (total attending = 12, total participation n = 10)

Pre-Assessment only (n = 1)
Pre-Assessment and Post-Assessment #1 (n = 5)
Pre-Assessment, Post-Assessment #1, and Post-Assessment #2 (n = 4)

Cross-Country Skiing For Families 2008

Family Groups (total attending = 58, total participation n = 52)
Adults (n = 81)
Children < 18 years old (n = 102)

Pre-Assessment only (n = 11)
Pre-Assessment and Post-Assessment #1 (n = 21)
Post-Assessment #1 only (n = 1)
Post-Assessment #1 and Post-Assessment #2 (n = 1)
Pre-Assessment, Post-Assessment #1, and Post-Assessment #2 (n = 18)

Family Snowshoe Adventure 2008

Family Groups (total attending = 13, total participation n = 12)
Adults (n = 18)
Children < 18 years old (n = 20)
Pre-Assessment only (n = 5)
Pre-Assessment and Post-Assessment #1 (n = 3)
Pre-Assessment and Post-Assessment #2 (n = 2)
Pre-Assessment, Post-Assessment #1, and Post-Assessment #2 (n = 2)

Earth Day Celebration 2008

Family Groups (total attending = 24)
Student helps develop family-based programs

What would “family night” look like in the outdoors? Possibly something like Leave No Family Inside, a series of family-oriented outdoor programs developed by University of Wisconsin-Stevens Point College of Natural Resources graduate student Emily Hill.

The programs, which range from snowshoe outings to family camping experiences, are held at the Boston School Forest.

Drawing on her undergraduate work in psychology and environmental studies, Hill is interested in how people develop environmental sensitivity, a developed state of empathy for the natural world. Hill was inspired by the work of CNR professor Daniel Sivek, who found that two strong factors in one’s development of environmental sensitivity were time spent outdoors during an extended period of time and the presence of role models.

“I wanted to see if outdoor family-friendly programs would make parents feel more comfortable as role models for their children,” Hill said. In 2006, Karen Dostal, environmental education coordinator at the Boston School Forest, conducted surveys of parents, teachers and principals to assess the program and determine ways to improve it.

“One thing was apparent in the parent comments. They wanted to spend more time outdoors with their kids. Emily looked at the surveys, we talked and the whole thing really dove-tailed from there,” Dostal said.

With grants from the Community Foundation of Portage County and the Wisconsin Environmental Education Board, Hill and Dostal were able to fund their programs for the public.

Brenda Lackey, assistant professor in the College of Natural Resources and Hill’s graduate adviser for the project, cites fear as a contributing factor to the absence of time people spend outside.

“In the media, you hear about children getting kidnapped. Many parents don’t let kids go outside,” she said. Lackey and Dostal see a nationwide increase in urbanization as a factor for environmental educators and scholars to contend with in their search to get people outdoors and caring about nature.

“We still have a strong tradition in our state of hunters and fishers ... as we become more urbanized, there are fewer people with a comfort level in being outdoors. We’re losing some of the skills it takes to be comfortable in an outdoor setting,” she said.

Overall, people are hesitant to try an outdoor experience if they have little knowledge of the outdoors in general, Dostal explained.

“Whether it’s hiking, camping or even berry picking, if it isn’t in a person’s experience, they are reluctant to try it out,” Dostal said.

Environmentally minded professionals are taking notice of the program. Hill and Dostal will present their programs at the Midwest Environmental Education Conference on Oct. 19.

The benefits of a family-based outdoor program go beyond knowledge of the outdoors and into strengthening the family unit, Hill explained. “There’s more and more research that being outdoors benefits everyone in the family,” Hill said.
APPENDIX Z

LNFI Project and Study Timeline

January 2007-
Researcher and Director of Boston School Forest’s submittal:
2007-2008 Wisconsin Environmental Education Board Grant

February 2007-
Researcher’s completion of the Web Tutorial for Human Subjects Protection Training

February 2007-
Director of BSF’s submittal:
2007 Community Foundation of Portage County Grant

March 2007-
Researcher’s approval of Thesis Prospectus

March 2007-
Researcher’s submittal of Concurrent Presentation application to the Midwest Environmental Education Conference (2007)

April 2007-
Researcher’s submittal of LNFI program assessment materials to the Institutional Review Board for the Protection of Human Subjects, University of Wisconsin- Stevens Point (and acceptance)

April 2007-
Researcher’s submittal of first press release to UW-SP

April 2007-
Researcher’s first graduate seminar presentation

May 2007-
The BSF celebrates its 70th Anniversary

May 2007-
Researcher and BSF awarded $9,158.00 on behalf of LNFI project: (2007-2008 WEEB Grant)

May 2007-
BSF awarded $1,300.00 on behalf of LNFI project:
(2007 Community Foundation of Portage County Grant: Ward & Ethel Cable Fund, Environmental Endowment Fund of Portage County, and the Community Grant Fund)

May 2007- Researcher accepted to present during MEEC 2007

July 2007- LNFI program, Leave No Trace Family Camp (7/28/07-7/29/07)

July 2007- Researcher and Leave No Trace Family Camp family participants featured on WAOW News line 9 Wausau, WI, 7/28/07 10pm television news; Getting Families Outside, waow.com (posted 7/28/07).

August 2007- Feature in the Portage County Gazette, Families sample camping at Boston School Forest (8/10/07, Page 2).

September 2007- LNFI program, Questing and Geocaching for Families (9/8/07)


September 2007- Researcher’s submittal:

UW-SP 2007-2008 Student Research Fund Grant

October 2007- Researcher and BSF featured in the Stevens Point Journal, Student helps develop family-based programs (10/1/07, 3A).

October 2007- Researcher awarded $500 on behalf of LNFI project: (UW-SP 2007-2008 Student Research Fund Grant)

October 2007- Researcher and Director of BSF present LNFI project at MEEC 2007, Concurrent Session (10/19/07, 10:15am);
participants sign-up for LNFI Guidebook

January 2008- Initial data analysis by researcher for Leave No Trace Family Camp and Geocaching and Questing for Families programs

January 2008- Director of BSF and BSF staff lead LNFI-related “Questing” workshop at the Wisconsin Association for Environmental Education Winter Workshop 2008

February 2008- LNFI program, Cross-Country Skiing for Families (2/9/08)

February 2008- Feature in the Portage County Gazette, Family skiing program attracts nearly 200 people (2/15/08, Page 40).

February 2008- LNFI program, Family Snowshoe Adventure (2/21/08)

February 2008- Initial data analysis by researcher for Cross-Country Skiing for Families program

March 2008- Initial data analysis by researcher for Family Snowshoe Adventure program

April 2008- LNFI program, Earth Day Celebration (4/22/08)

April 2008- Researcher’s submittal of second press release to UW-SP

April 2008- Researcher’s second graduate seminar presentation

May 2008- Researcher featured in the UW-SP’s College of Natural Resources CNR News newsletter (Spring 2008, p. 6).

May 2008- Researcher featured in the Wisconsin Center for Environmental Education’s LEAFlet newsletter (Summer 2008, p. 4-5).
June 2008- Researcher and Director of BSF present LNFI Project at the 2008 Wisconsin State Park System Interpretation Workshop (6/10/08, 11:00am); presentation participants sign-up for LNFI Guidebook

June 2008- Researcher’s Oral Defense

July 2008- Researcher’s distribution of LNFI Guidebook to MEEC 2007 and 2008 WI State Park System Interpretation Workshop participants

July 2008- Researcher’s submittal of Master’s Thesis to UW-SP

July 2008- LNFI Program, Leave No Trace Family Camp (7/11/08-7/12/08)

August 2008- Researcher’s earning of Master’s Degree

October 2008- Researcher and Director of BSF present LNFI project at the North American Association for Environmental Education Annual Conference 2008, Roundtable Discussion (10/16/08); participants receive and sign-up for LNFI Guidebooks