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NATURAL HISTORY FIELD GUIDE: COMMON GROUND OUTDOOR ADVENTURES

by

Casey Ann Trout

Thesis submitted in partial fulfillment of the requirements for the degree

of

DEPARTMENTAL HONORS

in

Environmental Studies in the Department of Environment and Society

| Approved: | |
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ABSTRACT

Common Ground Outdoor Adventures (Common Ground) is a 501(c)(3) nonprofit based in Logan, Utah. Americorps VISTA volunteer Kate Stephens initially founded Common Ground in 1993 to enhance adaptive recreational opportunities for individuals with physical disabilities in the Cache Valley community. The organization has grown since that time and is now a fullystaffed entity which annually serves 3,600 individuals. It works with individuals with a variety of disabilities, including cognitive, physical, and emotional. Considering that there are systemic and social barriers to individuals with disabilities participating in outdoor recreation activities, the role that Common Ground plays to provide opportunities to these individuals is paramount. Case studies have shown that outdoor recreation benefits spirituality, mental restoration, personal development, physical health, and well-being for people with and without disabilities. Staff at Common Ground would like to integrate more environmental education into their outings to foster greater understanding of the natural world among participants and provide non-physical leadership opportunities for their volunteers and participants with physical disabilities. However, high turnover of staff and volunteers makes this difficult. In order to support Common Ground in implementation of natural history environmental education in its programming, a Natural History Field Guide was created between Spring 2018 and Spring 2019. Methods used to create the Guide included review of existing guidebooks, online resources, Utah State University Extension materials, and consultation with local experts. The Guide is 161 pages long and includes information about the area's geology, plants, wildlife, wetlands, climate, and local hikes. The purpose of the Guide is to promote thoughtful inquiry into features of the environment and enhance participant engagement. It has already shown promise for improving participant experience and promoting thoughtful discussion on outings.

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INTRODUCTION

Common Ground Outdoor Adventures (Common Ground) is a 501(c)(3) nonprofit in Logan, Utah that "enhances the lives of youths and adults with disabilities through quality outdoor recreation. This is achieved by removing the physical, social, and financial barriers faced by individuals with disabilities" ("Experience Life Enhancing Adventure!" n.d.). Common Ground is not unique in its mission to provide recreational opportunities for individuals with disabilities. The history of organizations like Common Ground date back to the 1970s, when many programs were founded to increase access to outdoor recreation for individuals with physical disabilities through the use of adaptive equipment. Currently, many of these organizations also work with individuals with cognitive disabilities. These programs fulfill an important need because it has been found that outdoor recreation is highly beneficial to an individual's overall wellbeing, yet there are clear barriers to individuals with disabilities participating in outdoor recreation (Dillenschneider, 2007; Warren, Roberts, Breunig, & Alvarez, 2015; Holland, Powell, Thomsen, & Monz, 2018).

Integrating environmental education into outdoor recreation has been shown to increase student engagement and positive feelings toward nature (Szczytko, Carrier, & Stevenson, 2018; Cho & Lee, 2017). This is useful when working with individuals with cognitive disabilities since it provides a foundation for discussion and maintains interest during outdoor trips (A. Ristorcelli, personal communication, April 26, 2019). To improve Common Ground's capacity to include environmental education on its trips, a Natural History Field Guide (the Guide) was created. It is written in an easy-to-understand format and is highly portable so that it can be taken on trips. The Guide has already been used on Common Ground outings and has shown promise of improving participant experience and interest.

BACKGROUND

Issues

Working with Individuals with Disabilities

There are four broad categories of disabilities: intellectual, physical, sensory, and mental illness ("Types of Disabilities," n.d.). Intellectual disabilities are often referred to as cognitive disabilities. They are related to cognitive processing and planning skills. Disabilities under the Autism Spectrum Disorder are an example. Physical disabilities are related to motor control and balance or ambulation and mobility (Dillenschneider, 2007). Sensory disabilities are associated with the senses, such as vision, hearing, touch, or spatial awareness ("Types of Disabilities," n.d.). Mental illness includes post-traumatic stress disorder, depression, and obsessive-compulsive disorder ("Types of Disabilities," n.d.).

When engaging individuals with disabilities in outdoor recreation activities it is crucial to be aware of how their disability may affect their capacity to participate in such activities. For example, individuals with intellectual disabilities may need more repetition and practice to complete tasks as well as clear and slow instruction. Individuals with physical disabilities may require assistive devices. Individuals with sensory disabilities may need hand-over-hand teaching or physical guidance through body positioning. Individuals with mental illnesses need additional supervision and extra time to feel comfortable in a new, outdoor environment (Dillenschneider, 2007).

It is important to clearly explain what any outdoor recreational activity will entail before embarking on it, with all relevant details about what will be expected. This includes how accessible the trailhead is, how long the activity is expected to last, and what physical

movements will be used. A discussion on the expectations gives participants the opportunity to express any concerns they have at the start and provides an opportunity for the trip guide and the participant to brainstorm alternative options for activity components that may be challenging (Dillenschneider, 2007).

Additionally, professionals working with individuals with disabilities should avoid words and terms that imply that a participant can't or won't do something because of a disability. Instead, professionals and educators should focus on the strengths an individual possesses that will make it possible for them to participate in a diverse range of activities (Clarke, Embury, Knight, & Christensen, 2017). They should ensure that the individual has the opportunity to clearly explain to the instructor their actual needs or strengths, and that the instructor is not making assumptions about the individual's ability level or interest in doing a certain activity (Dillenschneider, 2007).

People-First Language

Since the 1990s and the passage of the Americans with Disabilities Act, there has been a concerted effort to ensure that individuals with disabilities are referred to using people-first language. Traditional terms to describe individuals with disabilities include "retarded," "handicapped," and "disabled" (Clarke et al., 2017). These terms tend to label individuals with disabilities, characterizing them primarily by their disability and making their disability a primary component of their identity. Using people-first language, however, focuses on individuals with disabilities as being people first (Clarke et al., 2017). Instead of defining or completely characterizing these individuals by their disability, it empowers them as unique persons with just one component of their identity being a disability. People-first language emphasizes stating an individual's disability as secondary to their role as an individual. For

example, instead of saying "handicapped individual" or "Jim is handicapped," saying "a person who uses a wheelchair" or "Jim uses a wheelchair" empowers the individual with a disability and emphasizes their disability as being secondary to their role as an individual (Clarke et al., 2017). Additionally, when addressing an individual with a disability it is important to speak directly to them instead of to a caretaker or parent that is standing nearby.

Value of Outdoor Recreation

Outdoor recreation has been shown to provide a wide range of benefits. In a systematic literature review of outcomes associated with participation in wildland recreational activities, Holland et al. (2018) found that activities ranging from paddling sports to hiking to rock climbing resulted in overwhelmingly positive changes in spirituality, academic interest and performance, outdoor recreation interests and skills, new perspectives, environmental stewardship, mental restoration, pro-social behaviors, personal development, physical health, and well-being. Additionally, outdoor recreation has been shown to provide benefits for individuals with disabilities. The literature has found that outdoor skills, socialization, self-concept and self-esteem, personal growth, respect for nature, and positive behaviors have improved in individuals with disabilities that have participated in outdoor recreation programs (McAvoy & Lais, 2003; McAvoy, Smith, & Rynders, 2006). Earlier research also found that outdoor education is beneficial for children with disabilities (Vinton & Zachmeyer, 1986).

Additionally, inclusive family wilderness programs for families having one individual with a disability have shown to increase family cohesion, the family's ability to try new things, the amount of time that a family spends together, and the number of activities that a family does together (McAvoy et al., 2006). Integrated wilderness programs for children with and without disabilities have been shown to increase empathy in participating children without disabilities

and increase sensitivity of all participating children to the needs of others (McAvoy & Lais, 2003).

Value of Environmental Education

Environmental Education is "a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment" ("What is environmental education?" n.d.). The U.S. Environmental Protection Agency (EPA) defines environmental education as increasing the following ("What is environmental education?" n.d.):

- Awareness and sensitivity to the environment and environmental challenges
- Knowledge and understanding of the environment and environmental challenges
- Attitudes of concern for the environment and motivation to improve or maintain environmental quality
- Skills to identify and help resolve environmental challenges
- Participation in activities that lead to the resolution of environmental challenges

Integrating environmental education into outdoor recreation is an excellent way to enhance the experience. It connects individuals with the environment and gives them an opportunity to foster a greater appreciation for the natural world and all of its complexities. Cho and Lee (2017) found that classroom discussion, addressing fears that children may have, and learning in a classroom and outdoor setting about insects can promote children's positive feelings and affinity for insects. They found that environmental education on honey bees also promoted biophilia in children. Biophilia is the "motivation for individuals' willingness to protect nature" (Cho & Lee, 2017, pg. 448).

Additionally, there is evidence that children with Attention-Deficit/Hyperactivity

Disorder (ADHD) and other attention-related disabilities are less distracted and more engaged with learning in an outdoor setting. A study by Szczytko et al. (2018) found that teachers

perceived that their students had significantly improved attention spans and decreased disruptive behaviors when learning outdoors. They also found that outdoor education reduced anxiety and improved trust and group cohesion for students with mild to moderate learning disabilities.

When working with individuals with cognitive disabilities, integrating environmental education into outdoor recreation can increase interest in the environment, promote environmental stewardship, and improve overall experience (Militano, 1998). Additionally, environmental education often provides a foundation for discussion about the natural world which promotes overall engagement of participants (A. Ristorcelli, personal communication, April 26, 2019). Environmental learning generally does not require physical abilities, which also makes it a great avenue for engaging individuals with physical disabilities in instructor leadership roles (K. Stephens, personal communication, April 26, 2019).

Natural History and Environmental Education

Natural history can be defined as "a practice of intentional, focused attentiveness and receptivity to the more-than-human world, guided by honesty and accuracy." (Fleischner, 2002). It generally consists of the study of the biotic and abiotic components of a natural landscape, such as the geology, plants, and wildlife. A discussion relating to an area's natural history is one of the best ways to integrate environmental education into an outdoor experience. It has also been found to be effective at maintaining interest on outdoor excursions (A. Ristorcelli, personal communication, April 26, 2019).

History

Outdoor recreation activities have historically been practiced largely by white, able-bodied men with enough disposable income and time to participate in such activities (Warren et al., 2014; Holland et al., 2018). Recent efforts have been made to include a more diverse group of individuals in outdoor recreation, including women, people of color, people of various socioeconomic backgrounds, and people with varying levels of physical and cognitive abilities (Warren et al., 2014). The creation of nonprofit organizations, governmental initiatives, and the adaptation of traditional outdoor engagement organizations have improved opportunities for outdoor recreation for diverse individuals. One example is the Find Your Park Campaign, which is sponsored by the National Park Foundation in collaboration with the National Park Service. It encourages Americans of all backgrounds to spend time recreating in their national parks and monuments.\(^1\) Another example is Outward Bound, a non-profit that provides outdoor excursion opportunities for students and offers generous scholarships for students without the financial means to pay the full cost of an outdoor experience.\(^2\)

Outdoor Recreation for Individuals with Physical Disabilities

The first adaptive sports programs began after World War II, when many returning veterans came home with physical disabilities that prevented them from participating in traditional sports ("Early History," n.d.). Jim Winthers, a WWII veteran, developed adaptive downhill ski equipment so that his friends who had lost limbs in the war could continue to ski after returning home ("Early History," n.d.). For many years, adaptive downhill ski equipment was the only commercially-produced adaptive equipment. Other adaptive outdoor recreation

¹ https://findyourpark.com/

² https://www.outwardbound.org/

opportunities – such as hiking, rafting, and cycling – were not possible until the 1970s when a small number of organizations emerged to provide opportunities for individuals with physical disabilities to engage in these activities. For many years the adaptive gear that made this possible was hand-crafted; it was not until recently that adaptive equipment for these sorts of recreation activities has been commercially-produced (K. Stephens, personal communication, April 26, 2019; A. Ristorcelli, personal communication, April 26, 2019).

In 1977 Splore Outdoor Adventures was founded in Salt Lake City as the first program established in Utah with a mission to provide adaptive outdoor recreational opportunities for individuals with disabilities ("What is Splore?" 2015). In 2017 Splore joined the National Ability Center, a similar organization based out of Park City, UT that was founded in 1985 ("Our Story," 2015). The National Ability Center has a scholarship program to ensure that individuals that cannot afford program fees have the opportunity to participate in outdoor recreation activities.

Organizations such as the National Ability Center are paramount in breaking down the tradition of outdoor recreation being limited to able-bodied, financially-secure white men. There are clear barriers to individuals with physical disabilities engaging in outdoor activities, as these opportunities are often impossible without adaptive equipment. A nationwide survey completed by the US Forest Service in 2004 found that people with disabilities identify as facing more barriers to completing outdoor recreation activities than people without disabilities; this is why organizations that break down these barriers are crucial for providing equal opportunity to all individuals (Williams, Vogelsong, Green, & Cordell, 2004). Organizations such as Splore have a suite of assistive devices that enable these individuals to actively engage with the outdoors, and a staff and volunteer base with the knowledge of how to use such devices safely. Additionally, these organizations offer the use of assistive devices at a price that is similar to or below the

typical cost for an able-bodied individual and subsidize the cost of these trips with scholarships.

This ensures that regardless of an individual's financial situation or physical ability, they are able to engage with the outdoors to the same level as an able-bodied, financially-secure individual.

Outdoor Recreation for Individuals with Cognitive Disabilities

While there was much discussion about engaging individuals with physical disabilities in outdoor recreation beginning in the 1970s, individuals with cognitive disabilities were often left out of the conversation until the early 2000s (A. Ristorcelli, personal communication, April 26, 2019). Programs that provide outdoor recreation experiences for individuals with disabilities were generally founded upon a tradition of enabling those with physical disabilities to participate through the use of adaptive equipment. It is likely that the rising popularity of catering outdoor experiences to individuals with cognitive disabilities is a result of changing cultural attitudes. These attitudinal dynamics occurred after many issues of access for individuals for physical disabilities were addressed. In the early 2000s, about 10 years after the passage of the Americans with Disabilities Act, many organizations began offering opportunities for individuals with cognitive disabilities to engage in outdoor recreation (McAvoy et al., 2006).

Common Ground

Foundations

In 1993, Kate Stephens moved to Logan, Utah to start her role as an Americorps VISTA volunteer. Her task was to work with Options for Independence to enhance outdoor recreational opportunities for individuals with disabilities in the Cache Valley area. Options for Independence is a nonprofit in Logan, Utah with a mission to "provide services to individuals with disabilities to facilitate their full participation in the community and raise the understanding of disability issues and access to the community" ("Making Independence a Reality," n.d.). Options for Independence was first founded in 1982 by Helen Roth with the goal of encouraging the community to become more accessible for individuals with physical disabilities ("Making Independence a Reality," n.d.). It still exists in Logan today.

The Americorps Volunteers in Service to America (VISTA) program began in 1965. It is sponsored by the U.S. government and has the mission of strengthening organizations that work to alleviate poverty in communities across the United States ("Americorps VISTA," n.d.). Options for Independence had requested to have an Americorps VISTA volunteer support them in developing opportunities for individuals with physical disabilities to engage in recreation, which opened up Stephens's position.

By April of 1993 Stephens had already begun work with various community partners to organize canoe, hiking, birding, and kayak trips. These efforts made use of home-made adaptive equipment so that individuals with physical disabilities could join on the trips (K. Stephens, personal communication, April 26, 2019). During that first year, Stephens spent a lot of time developing relationships with community leaders and organizations that had the resources to support the new program's mission. Helen Roth and Alan Stokes (the latter a prominent Logan

community member) were instrumental in introducing her to community leaders and local organizations, such as the Utah State University (USU) Outdoor Recreation Program (ORP) and the Bridgerland Audubon Society. Both supported Stephens in making the initial adaptive outdoor trips possible (K. Stephens, personal communication, April 26, 2019).

Stephens was also researching the most effective approach for assisting individuals with physical disabilities to engage in outdoor recreation. A major inspiration for her was Wilderness Inquiry, a Minnesota non-profit founded in 1978 by Greg Lais. The purpose of Wilderness Inquiry is "connecting you with nature and other people through shared outdoor adventures" ("About Wilderness Inquiry," n.d.). Wilderness Inquiry is "all about access, inclusion, and opportunity" and "operate[s] in a manner that facilitates full participation by everyone, including people who come from different physical, cultural, or socio-economic places" ("About Wilderness Inquiry," n.d.).

Stephens was inspired by the integrated approach that Wilderness Inquiry took to outdoor trips. Integrated trips include individuals with and without disabilities under the premise that they are sharing an outdoor experience together. This contrasts with most other outdoor recreation programs for individuals with disabilities that existed in the early 1990s, which catered only to the population of individuals with physical disabilities. Instead, Wilderness Inquiry saw individuals with and without disabilities as equals in the outdoor recreation field and worked to provide outdoor experiences that did not select only for individuals with physical disabilities. A typical group trip with Wilderness Inquiry consisted of a mix of individuals with physical or sensory disabilities, individuals without any identified disabilities, and a selection of staff members that may or may not have disabilities (McAvoy & Lais, 2003).

In contrast to most other adaptive programs at the time, the name of Wilderness Inquiry did not imply that the organization only worked with the subset of individuals with disabilities. For example, when Splore was first created it was an acronym which stood for "Special Populations Learning Outdoor Recreation and Education" ("Participant Answers," n.d.). Programs with names that use now-outdated terms were the norm for the time. In contrast, Splore now defines one of its goals as providing outdoor recreation opportunities to people of all abilities, including those with disabilities, those with financial hardships, and at-risk youth. This new approach is more aligned with the philosophy that Wilderness Inquiry first embraced in 1978.

Stephens saw Wilderness Inquiry as forward-thinking for the time and used it as a model when establishing Common Ground (K. Stephens, personal communication, April 26, 2019). With the notion of equal opportunity for individuals with and without disabilities, and the integration of a diversity of individuals on outdoor recreation trips, Stephens decided to form an organization called "Common Ground Outdoor Adventures" during her first year as an Americorps VISTA volunteer. The purpose of the name is to demonstrate that outdoor recreation opportunities provide an excellent opportunity for individuals with and without disabilities to get to know one another and enjoy a shared, inclusive outdoor experience together, and therefore to find "common ground" (K. Stephens, personal communication, April 26, 2019).

During the first few years of Common Ground's existence, Stephens was the sole employee coordinating the organization. She served a second year as an Americorps VISTA Leader to continue pursuing the development of Common Ground as a resource to individuals in the Cache Valley community, and then later acquired funding through Logan City Parks and Recreation Department to continue her work (K. Stephens, personal communication, April 26,

2019). During this time Stephens worked closely with the USU ORP, Splore, and the Cooperative Wilderness Handicapped Outdoor Group (CW HOG). The CW HOG is based out of Idaho State University's Outdoor Adventure Center and serves to facilitate multi-day destination trips with adaptive equipment.³ Stephens also pursued her M.A. in Environmental Education through the Teton Science School while directing Common Ground, so much of the original programming had a strong environmental education focus (K. Stephens, personal communication, April 30, 2019).

It was not until 1997 when Common Ground received a federal grant through the U.S. Department of Education that it became possible for the organization to acquire permanent office space, purchase a suite of adaptive equipment, and hire staff to assist with the organization's operation and implementation of outdoor recreation trips. Stephens continued to direct Common Ground for three years after its establishment as a 501(c)(3) organization. She now serves as an emeritus member on the Board of Directors and continues to connect USU students and faculty with Common Ground through her position in the USU Center for Community Engagement (CCE).

Current Philosophy

At its inception, Common Ground primarily focused on providing opportunities for individuals with physical disabilities to recreate in the outdoors to the same level as their ablebodied family members and friends. It often brought community members together through trip experiences which included a mix of individuals with and without physical disabilities. Since then the organization has evolved to serve a large population of individuals with cognitive and

³ https://www.isu.edu/outdoor/cw-hog/

emotional disabilities; now it primarily works with individuals with cognitive disabilities. As at its founding, Common Ground still partners with nearby organizations for their excursion trips. This includes the National Ability Center and the Get Out and Live (GOAL) Foundation, which is located in Ogden, Utah.⁴ Many of their current trips are primarily focused on engaging individuals with cognitive disabilities.

Since individuals with cognitive disabilities are often in one classroom or program, it is easier for the staff at Common Ground to reach out to them. Seeking out and informing individuals with physical disabilities about the opportunities that the organization can offer to them is much more difficult since they tend to be integrated within traditional classrooms (A. Ristorcelli, personal communication, April 26, 2019). One of the current challenges for staff at Common Ground is balancing the number of opportunities they provide for individuals with cognitive disabilities as well as those with physical disabilities. They worry that many people with physical disabilities do not reach out to them because they are deterred by the belief that the organization works only with individuals with cognitive disabilities (A. Ristorcelli, personal communication, April 26, 2019). Another challenge that staff face is being able to continue the organization's initial spirit of an integrated outdoor experience. This has become more difficult in recent years due to limited staff and financial resources; the staff want to ensure that the bulk of their resources go toward supporting individuals with disabilities (A. Ristorcelli, personal communication, April 26, 2019).

Staff at the organization are attempting to transition back to providing outdoor recreation opportunities that are more aligned with the initial spirit of the organization at its founding while continuing to provide plentiful opportunities for individuals with cognitive disabilities. The

⁴ https://www.facebook.com/GetOutAndLiveUT/

organization now offers veteran trips where spouses can attend and has plans to allow family members to join their children or siblings with disabilities on their daily trips and overnight excursions in a return to a more integrated outdoor experience (A. Ristorcelli, personal communication, April 26, 2019).

Another one of Common Ground's primary goals is to provide financially affordable outdoor experiences to individuals with disabilities, so that those from any socioeconomic background can participate. They achieve this through highly reduced trip prices. Staff at Common Ground have found that offering a price for an outdoor experience that is much lower than the true cost of that experience leads participants to value the experience less, however (A. Ristorcelli, personal communication, April 26, 2019). Common Ground staff tried increasing trip costs and implementing a scholarship program but found that it resulted in the number of individuals participating on their trips to markedly decrease. They worried that the extra step of filling out the scholarship application might be too much for individuals with a financial hardship, or that it may be difficult for them to acknowledge that their financial situation requires they use a scholarship program to participate (A. Ristorcelli, personal communication, April 26, 2019).

In order to achieve their mission of inclusive outdoor experiences that are also financially affordable, staff at Common Ground found that applying a system where they make participants aware of the true cost of a trip and then allow them to pay anywhere between the charged price and the true cost has been effective. For example, their day-long ski lessons at Beaver Mountain-which make use of adaptive equipment, ski lessons, and include a lift ticket- only cost \$60. However, the true cost is closer to \$120. This past winter they informed participants of the true cost and found three participants willing to pay this amount. The staff feel that this approach is

effective for ensuring their participants value the experience more and pay the full cost if they are able to, without deterring participants if they lack the financial means to pay the full cost (A. Ristorcelli, personal communication, April 26, 2019). This also increases the number of participants they can serve, given that those paying the full cost of the trip make it possible for additional individuals to participate.

During the 1990s, Common Ground programs had a strong environmental education component, which was primarily a factor of Stephens's experience pursuing her M.A. at Teton Science School. More recently, high rates of staff and volunteer turnover at Common Ground have made it difficult for the organization to include natural history education on its local trips. This makes training programs to educate volunteers on Cache Valley's natural history inefficient and it is unrealistic for staff to spend a lot of time educating themselves on the area's natural history given their other responsibilities.

However, the staff at Common Ground would like to better integrate environmental education on the local natural history into their trips. They feel that this would enhance participant experience and learning outcomes (A. Ristorcelli, personal communication, April 26, 2019). Additionally, many participants at Common Ground have strong interests in learning about the local natural history. Participants have been excited to learn about snow and where it comes from, as well as the fact that sap from maple trees is edible (C. Trout, personal observations, February 21, 2018 & May 3, 2019).

THE PROJECT

Some challenges with integrating natural history environmental education on Common Ground's excursions include high rates of volunteer and staff turnover. This makes it difficult for Common Ground personnel to be well-aware of the natural history of Cache Valley. This is unfortunate because natural history is often a great starting point for conversation on local outings. In order to combat this dilemma, Alex Ristorcelli, the Program Director at Common Ground, reached out to the CCE at USU to request that a student group put together a Natural History Field Guide that would specifically cater to Common Ground's needs. The issues with many existing field guides for the Cache Valley area were that they were too specific, too detailed, or difficult to understand (A. Ristorcelli, personal communication, April 26, 2019). A simple field guide created with Common Ground's audience, staff, and volunteers in mind would be more appropriate.

The Guide could also be used to increase staff capacity while addressing the need to provide more meaningful intellectual experiences for people with physical disabilities. Adding natural history themes to trips encourages people with physical disabilities to participate and potentially take on leadership roles instructing natural history topics. By focusing on natural history, people of all abilities can learn together about the common place we call home.

At the time that Ristorcelli reached out to the CCE, a semester class was just starting for students in the Community Engaged Scholars program called Foundations of Civic Engagement. The Guide seemed like the perfect semester project for students in the class. As a Community-Engaged Scholar that had joined the program a few years earlier, I did not need to enroll in the class that semester for any credit for the program. However, I was seeking out a volunteer opportunity for another class that I was in-Environmental Nonprofit and Volunteer

Management- and had a strong interest in environmental education given my major is

Environmental Studies. I attended the Foundations of Civic Engagement course that semester

and took on the primary responsibility of coordinating the creation of the Guide as my capstone

project for the Community-Engaged Scholars Program and Honors Program.

Objectives and Methods

The Guide was a year-long project created in close collaboration with Alex Ristorcelli.

The objectives that Ristorcelli had for the Guide included the following:

- Portable and easy to bring along on trips
- Written for about a fifth-grade reading level
- Includes information on many components of Cache Valley's natural history
- Keeps information concise and is easy to skim
- Includes suggestions for engaging participants with the material

Information in the Guide was assembled using Cache Valley plant ID books, books on the area's local geology, online resources, USU Extension resources, and in consultation with local naturalist Jack Greene. The Guide was made initially using Google Docs when it was undertaken as a group project in the Foundations of Civic Engagement class and then using Microsoft Word. There were regular meetings with Ristorcelli to provide progress updates and ensure that the Guide was on track to meeting the needs of Common Ground staff and participants.

Results

A link to a full copy of the Guide is available in Appendix A. The final product is 161 pages long and includes 218 references. It also includes images of each plant and wildlife species identified in the book along with diagrams to promote understanding of concepts such as the water cycle and parts of a flower. The Guide is small enough to fit in a day pack for easy access.

The Guide includes information on Leave No Trace principles, Cache Valley geology, local plants and trees, wildlife, wetlands, climate, and the most common hikes used for Common Ground outings. It includes discussion questions, interactive activities, and interesting facts, all of which will be very useful to trip leaders so they can better engage participants with the material. It was specifically written to be a general quick reference manual for Common Ground trip leaders. It adopts an easy-to-understand writing style and makes use of pictures that can be shown to participants to encourage engagement with the material.

A draft of the Guide was used during summer 2018 by Alex Ristorcelli and other personnel at Common Ground. The Guide was found to be very useful for identifying common plants encountered along the trail and providing information that sparked conversation among participants. After using the Guide, it was observed that participants were more engaged and interested in the environment and natural history. In some cases, it prompted participants and staff to research additional information upon returning from their trip. Overall, the Guide has shown promise in achieving the goal of enhancing the outdoor and environmental education experience among all Common Ground participants. The Guide also encourages greater participation among participants with physical disabilities by providing non-physical instructor leadership opportunities and intellectually stimulating content.

Discussion and Conclusion

Future work to enhance the accessibility and use of the Guide includes making the Guide available in accessible formats, such as large print and audio, so that it can be used by a larger number of individuals with disabilities. In addition, a participant activity guide could be developed for use in conjunction with the Guide. A potential section to add to the Guide is information about local insects and their benefits to the ecosystem. A digital, Microsoft Word copy has been left with Kate Stephens so that future Community-Engaged Scholars or Common Ground volunteers can add to and edit the original Guide.

Staff and volunteers at Common Ground are well aware of the benefits of outdoor recreation and environmental education. They are also aware of the methods that are most appropriate for working with individuals with disabilities in an outdoor setting, and the importance of applying people-first language while working with their participants. The Guide empowers volunteers and staff to integrate natural history and environmental education while leading outings. Alex Ristorcelli is satisfied with the Guide and excited to start using it on Common Ground outings (personal communication, May 8, 2019).

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APPENDICES

Appendix A: The Guide

Due to the length of the Guide (161 pages), it has not been included in this document. A pdf version of the Guide is available at:

 $https://drive.google.com/file/d/1oFUsQK2gY_BlHjMHj7qr7B0TulIJ_Sba/view?usp=sharing.$

Appendix B: Reflective Writing

This section includes a reflection on some of the volunteer activities that I participated in during my time as a Community-Engaged Scholar.

Creation of the Natural History Field Guide

I was happy to hear of the opportunity to support Common Ground in their effort to create a field guide. I felt that given that the Program Director reached out about this particular project that it was a true need for the organization and that I would be spending my time in an efficient and effective manner by supporting them in this endeavor. At the beginning of the process I worked with a team of five other students. We divided the work of creating the guide amongst us based on the different sections that we brainstormed at the beginning of the project to compose the guide. Group work was slow, however, and especially without clear expectations for what the final product would look like or what the entire scope of it would be.

I spent a lot of time trying to clean up the Guide before the Program Director printed a draft of it to use during summer 2018, but there was still much work to be done to fit fully within the scope of what I was envisioning for the project. In the fall when I returned to classes I went to Common Ground's office each week to work on the Guide and made sure to follow up with

staff throughout the process to ensure that it was exactly the product that they were looking for. I continued working on it through spring 2019 and am now relieved to be able to say that it is printed and the final version has already been used on some of Common Ground's outings. It looks as I imagined it would and I genuinely feel that it will be a valuable resource for the organization.

I found that researching and compiling information for the Guide was not stimulating, so I really had to prioritize working on the Guide to ensure that I made progress. The difficulty I had in carrying out research for the Guide is related to the fact that I have never had a strong interest in natural history, though I do love being outside and casually learning about different plants and wildlife. Additionally, I do have a strong interest in engaging people with nature, and the Guide is an excellent way to do that, which motivated me to keep working on it until it was a product to really be proud of. Now that the Guide is finally completed, I look back on it and consider it as one of my greatest accomplishments during my time at USU.

Alternative Break Trips

During my time at USU I took the opportunity to participate in three alternative break trips, which are trips offered through the Service Center that occur during school breaks and integrate volunteerism.

On my first trip I visited Salt Lake City over Memorial Day Weekend, 2016 for "hunger and homelessness" themed volunteer projects. I visited a few of the places that I had volunteered at regularly in high school, such as the Road Home and St. Vincent's kitchen. I had the opportunity to meet and personally chat with individuals behind-the-scenes of these

organizations which really enhanced my experience and exposed me to a new angle for the work being done.

My second trip was an environmental stewardship themed fall break trip to Goblin Valley, Utah. We ended up helping a Bureau of Land Management (BLM) staff clean out firepits and pick up trash in an area that is popular with campers. It certainly prompted me to carefully consider the trash that I leave behind while traveling outside, including charcoal in a firepit, and to be more aware of fully cleaning up after myself after I leave a campsite so that it does not become the job of a BLM employee to clean up after me. This experience prompted me to consider the importance of including a section on Leave No Trace principles in the Common Ground Natural History Field Guide.

My last alternative break trip was during Spring Break. I went to a YMCA camp outside of San Francisco, California that offers programs to elementary school groups and has several summer programs for kids of all ages. On the trip I served as a cabin leader for sixth grade girls that were there with a class group. It was quite an exhausting experience to be constantly responsible for ensuring that the sixth graders there for the camp were okay and having a good time. I still fondly remember my own experience at camp in sixth grade, which helped me appreciate the valuable role that I played to make that experience possible for other children. My love for the outdoors and the environment was likely first developed through school trips I had as a kid. I would be interested to see which of the kids that participated in the camp also end up pursuing majors related to the environment or simply have a greater consideration of the environment in their day-to-day life due to their experience at camp.

International Service

I participated in an international volunteer trip to Costa Rica through International Studies Abroad (ISA). The program lasted for four weeks. I was placed with a host organization called Parque la Libertad, which was like a community center in a large park that offered different arts and environment programs to the community. My role while I was there was simply to support the staff however I could and with whatever they needed. I had the opportunity to help with a community tree planting day, a kids' camp, and landscaping work, among other things. I was so happy to be there and inspired by how hard-working and educated the staff were. Almost all of the employees working in the environmental sector were women with degrees in forestry or botany, which was very cool for me to see as a woman pursuing a degree in Environmental Studies.

The following summer I volunteered as a project supervisor for a cultural exchange program in Nicaragua for high schoolers. The program is called Amigos de las Americas. I participated myself as a high-schooler and went to a small community in Ecuador. As a project supervisor, I visited high-schoolers in four communities each week and ensured that they were healthy, that their host families and the community were still happy to have them there, and that they were making progress on supporting the community with a project that community members had decided to pursue. I also helped plan in-country trainings, took the high-schooler participants to the health clinic if they were sick, and built relationships with the host families and community leaders. We worked with Plan International and collaborated with the Plan facilitators that worked in each of the communities where high-schoolers were living for the duration of the program. I was inspired by the dedication that the facilitators had to the communities that they worked in and the compassion that they showed for the members of each

of those communities. The overall experience was certainly one of the hardest and most rewarding that I have had.

Americorps Service – Engagement Intern in the Student Sustainability Office

The last major volunteer experience that I have had during my time at USU has been working as an Americorps intern in the Student Sustainability Office (SSO). This past year I organized monthly volunteer projects, supported planning of Vegetarian Week and coordinated planning of Earth Week, supported the campus Farmers Market, and helped the other Americorps interns in the SSO with the tasks that they need to accomplish for their internships. My experience pushed me to develop my leadership skills relating to event planning, which include managing a budget, coordinating a planning committee, and running the set-up, facilitation, and take-down of events. I feel that I have improved my skills at engaging individuals with environmental issues and I hope that I have made a positive difference in some students' lives through my work at the SSO.

Future Volunteer Work

My commitment to community engagement was developed during my time as a Community-Engaged Scholar. I plan to continue to volunteer with Common Ground over the summer and will always try to integrate community engagement and effective volunteerism into my life. I am most apt to pursue work in the governmental or non-profit sector because of the positive experiences that I have had working with non-profits and government employees, and my belief that individuals in these fields truly love the mission of their organizations and the work that they are doing.

Appendix C: Author Biography

Casey Trout graduated in May 2019 from the Quinney College of Natural Resources (QCNR) at Utah State University. She dual majored in Environmental Studies and Statistics with a minor in Mathematics. During her time at Utah State she enjoyed being involved with student activities on campus, which included the Student Organization for Society and Natural Resources (SOSNR), a club in the Department of Environment and Society, the QCNR Student Council, and the Student Sustainability Office. She was recognized as the Outstanding Senior for the QCNR in 2019 and also received the Legacy of Utah State Award and Jardine Juniper Award for the College. For her involvement with the Community-Engaged Scholars program and the Service Center during her time at Utah State she received an Outstanding Service Award in 2019 through the Center for Community Engagement.