A Reflection of my Experience with The Charlie Blumenstein Water and Wildlife Conservation Internship Meredith Stewart

Thinking about my summer internship at the Silver Creek Preserve, my mind races over countless memorable times, and when I am asked what I did this summer, I struggle with knowing where to begin. The twelve weeks I worked for The Nature Conservancy in Idaho offered much: from social opportunities to intellectual challenges and outdoor physical work. I came to know and love the preserve, and appreciated the effort devoted to conserving its 883 acres. I not only got an idea of the 'behind the scenes' work involved in conservation, but I also enjoyed being an integral part of the Silver Creek Preserve staff. Along with putting my previous environmental knowledge to use, I gained and developed a variety of new skills.

Working at the preserve, I wanted to learn more about the flora and fauna of the region. I had the opportunity to learn about the regional biology of Idaho, and I cultivated an understanding of the origin, evolution, and movement of the local watershed. Silver Creek is a unique high desert spring creek whose source is not mountain run-off, but rather underground aquifers. The water gurgles upwards through the bedrock, having traversed the Sawtooth Mountains, flowed down the Big Wood River, traveled underground in an aquifer, hit an impermeable layer of sandstone, and finally bubbled up as spring creeks to form Silver Creek itself.

In the spirit of being a CC student, I pursued being environmentally conscious by biking the twelve miles to and from work each day – sometimes through muddy, gravel washboard roads – and by living on my own, cooking my own meals, and limiting technology use (no TV, no Internet, and no phone). I found the break from social and media distractions refreshing and inspirational. Although there isn't much city life in Picabo, the area bursts with natural activity from the wildlife, birds, fish, and bugs.

As the sole intern for the first seven weeks, I had many responsibilities and strived to find collaborative solutions to the challenges presented. Three years ago, The Nature Conservancy converted a few acres of agricultural land back into a more natural habitat of native grasslands. My job was to facilitate this conversion by running an irrigation wheel line, a system of rotating sprinklers. The conditions were not always ideal; it was wet, muddy, and the wheel lines always

needed adjusting, but I happily saw the fields grow to a sea of beautiful blooming Blue Flax flowers over the course of only twelve weeks.

By working, observing, and trying to find creative solutions for the various jobs encountered, I gained a variety of new technical skills. Flexibility, patience, and perseverance were critical in this job and helped me remain focused and dedicated. When I see irrigation wheel lines on other properties, I now appreciate the effort which goes into watering fields daily. It was a struggle to get the system to run each day, yet it was a fun challenge and a great learning experience.



Turning on the engine of one of the irrigation wheel lines in a field of Blue Flax

Bi-monthly we monitored the water in Silver Creek and the main tributaries. This involved measuring water statistics, including water flow, pH levels and dissolved oxygen content. Over time, I observed the human impacts on the physical composition of the creek, as water was increasingly taken for irrigation. Understanding the fragility of the creek helps visitors, landowners, and staff members alike to appropriately develop a balance between humans and nature. I routinely looked forward to spending the day collecting data and doing hands-on research. The science aspect of this job, made me want to pursue future research.

Similarly, I enjoyed helping Brianna, a graduate student at Montana State, with her thesis research on soil deposition. From working with Brianna and exploring new tributaries, I gained insight into how research and thesis work is conducted. I saw the necessity for thorough plans as several unforeseen problems may occur.



Water Monitoring on Silver Creek

With such a large piece of land to tend to, there is a lot of maintenance work to be done, so I was never at a loss for something to do. Daily work included maintaining trails and fences, fire monitoring, controlling weeds, assisting at other preserves, painting buildings and signs, landscaping, working to prevent invasive species from further infecting the watershed, and more. Having high expectations while still being given a flexible work schedule, I became more responsible, efficient, and self-disciplined. Even while doing the somewhat repetitious chores such as cleaning outhouses or processing data, the mission of The Nature Conservancy was always present in my mind. It was clear through their vigilance, dedication, and hard work that the efforts of the staff directly support their mission statement "to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive."



Mending a boardwalk on part of the Nature Trail loop

In August 2008, a fire burned over 14,000 acres across the Picabo Hills, including 22 acres on the preserve. Due to the disturbed soil, the area is very vulnerable to weeds. A year after the burn, we found Canada thistle overtaking some areas, leaving no room for native plants. After three weeks of rain, the plants, and unfortunately weeds too, were huge. Because of its extensive rhizome system, Canada thistle is difficult to kill and was often removed by spraying. Several warm afternoons were spent filling backpack sprayers with Aquaneat, a chemical safe to apply near water, and spraying the weeds to control the spread of thistle. We also worked with locals to dig out thistle and to replant native species such as Bitterroot and Lomatium. We collaborated and experimented with several methods for weed removal, keeping in mind the physical and economical advantages for each technique. Other weeds, too, presented challenges, such as the spread of yellow iris along the stream bank.

Though an innocent-looking flower, the yellow iris is considered a non-native invasive weed in Idaho. The deeply embedded bulbs make the removal of yellow iris a continuing challenge for the conservancy. Even with the help of half a dozen volunteers, the result of a hard day's work was a few broken shovels, a number of sore backs, and only a small percentage of Iris removed. Other invasive weeds such as houndstongue, white top, and deathly nightshade are

noxious and necessary to monitor at the preserve, and I learned to quickly identify such weeds and take the appropriate measures.



Surrounded by Canada Thistle, I spray the weeds with Aquaneat

In addition to working with water, plants, and animals, another main part of the experience was interacting with people. Most days, volunteers run the Visitor Center, but occasionally I worked the desk there, selling merchandise and chatting with visitors. One aspect of the job included learning about The Nature Conservancy's projects, going to meetings, and doing administration work. I enjoyed conversing with others in a professional manner and engaging with visitors, fishermen, co-workers, volunteers, locals, donors, and Nature Conservancy members. I learned from their expertise and improved my communication skills, forming meaningful relationships and connections. It was fun to sometimes work directly with people and other times work solo in the field. I enjoyed getting to know the landowners and the lay of the land. Also, I was continually impressed by the way organizations in the area worked together. We participated in the "Spray Days" of some local Land Trusts and were happy to see that when we held a Spray Day of our own, about a dozen volunteers showed up to help out.



Leading a group of 5th graders on an educational tour of the Silver Creek Preserve

Along with increasing my repertoire of handyman skills, I feel better equipped to make career decisions as I continue with schooling at Colorado College. I have a strong interest in environmental policy, such as water rights, the balance of shared and exclusive land-use, and conservation challenges. Simply talking with local landowners and reading about issues in the newspaper gave me insight. The internship at the preserve furthered my interest in environmental studies, and helped me make the decision to major in Environmental Science. The expectations and responsibility of this internship allowed me to grow in self-discipline, accountability, and efficiency. I am excited to continue learning and to blend my educational and outdoors experiences.

There are so many unforgettable moments that made this summer such a great experience. I will always value Silver Creek outdoor experiences: early foggy mornings with yackety and musical birds, evening walks in the company of coyotes and owls, friendly meet-ups with locals, and the not-so-friendly interactions with mosquitoes! I gained an understanding of why Silver Creek Preserve draws people back again and again. Jumping off the bridge into the water after a sweaty day, finding hiding spots of a great blue heron, watching baby owls learn to fly, or patiently attempting to catch the crafty trout, I am taking with me great memories of moments on the preserve.

As I've reflected on the events in my life that led up to this internship, on the past few months, and on my current place on the roads of career and life, it is clear that this internship with The Nature Conservancy at The Silver Creek Preserve has cleared the right paths at the right time. This pivotal opportunity has not only helped lay the foundation for my next

destination, but has offered exposure and direction as I begin to narrow the path towards my desired career.

Most importantly, I would like to thank Jack and Sara Blumenstein for this opportunity. I am very grateful to Colorado College for setting up the internship and to the Blumensteins for their financial support and generosity. I cannot think of a better way for Charlie's legacy to continue. The experience at the preserve has been invaluable, and it was a treat to work and live in an area as beautiful as Silver Creek.