Silver Creek Preserve

Summer 2015

As I look back on my twelve weeks at the Silver Creek Preserve, I can hardly believe that the experience was real. Unless you're there to see it for yourself, it is impossible to believe that a place of such great beauty exists. Words and pictures alone cannot do Silver Creek justice. A photograph cannot capture the scent of sagebrush and wildflowers drifting on the breeze, or the call of a coyote echoing off the Picabo Hills.

I suppose it all began with an email from the career center, which included a brief description of the internship and a small photo of the Picabo Hills looming over Silver Creek. Intrigued by both the beauty of the photo and the description of the internship, I Immediately typed "Silver Creek Preserve" into the search bar and began clicking through photos and scrolling through write-ups. It didn't take long for me to realize that Silver Creek was where I needed to spend my summer. As an avid fly fisherman the prospect of living and working in one of the world's most renowned trout fisheries was exhilarating.

Within minutes of opening the email, I was on the internship's web page trying to start my application. Although I was already sure that I wanted to spend my summer at Silver Creek, what I read on the Blumenstein Internship webpage made me forget about all my other reasons for wanting to travel to Idaho. Reading Charlie's story left no doubt in my mind that Silver Creek is a truly special place. From what I read it was clear that Silver Creek played a vital role in Charlie's life and help breed his passion for conservation. I hoped that it could do the same for me.

I arrived in Picabo just as the sun was beginning to set on the evening of May 26^{th} . The suns last rays were turning the hills a beautiful mixture of green and gold, and the barley swayed and shimmered in the breeze.

Sunny, the preserve manager, was out fishing when I arrived (an indication that we would become fast friends) and I was left to settle into the house on my own. Not twenty minutes later, however, Sunny arrived, waders on and fly rod in hand. I have to admit, I was somewhat apprehensive about the idea of living with my boss, but after just a short time speaking with her, it was clear that Sunny and I would get along just fine.

Not long after Sunny arrived, the assistant preserve manager, Mallory, walked through the door with her dog Madison in tow. As the three of us stood around the kitchen chatting that first night it dawned on me that this summer would be life changing. The passion with which both Sunny and Mallory spoke about their work was infectious. After just a few days of work it was easy to see why.

My role at Silver Creek this summer was multi-faceted. My primary responsibilities centered on the every day operation of the preserve. This included tasks such as clearing trails, running irrigation systems and even cleaning the outhouses. More importantly, however, I was given the opportunity to take part in both ecological research and water monitoring projects, affording me the opportunity to experience what it would be like to have a career in field science and conservation work.

Every other week, Mallory and I were tasked with monitoring the water conditions on the preserve. We would begin at the Stalker Creek bridge, and paddle down to the end of Kilpatrick Pond, stopping at five pre-determined transects to measure stream flow, temperature, PH and dissolved oxygen levels. In addition to our bi-weekly monitoring, we used automated thermometers and dissolved oxygen meters to gather contiguous temperature and dissolved oxygen data sets over longer time intervals. This data was then used to determine if conditions in the creek posed a danger to the trout population. Trout require a cool oxygen rich environment, and low dissolved oxygen levels along with high temperatures put a significant stress on trout. As a result, sustained low dissolved oxygen levels and high temperatures would warrant a closure of the Silver Creek fishery. Although the trout would likely be able to survive adverse conditions by holding in deeper cooler water, they would be unable to recover from a battle with a fisherman. Although a closure was something we all hoped to avoid this summer, we knew it was a possibility. This summers high temperatures and low rainfall caused the creek conditions to hover near minimum acceptable levels, and the entire fishing community seemed to collectively hold its breath each time new data was collected. Fortunately, however, conditions remained just favorable enough to keep both the trout and fisherman happy, and a closure was never needed.

In addition to water monitoring, I was able to participate in an aquatic insect study being conducted by the USGS. Silver Creek has long been known for its unparalleled aquatic insect hatches, and they are part of what makes Silver Creek such a unique and productive fishery. In 2014, however, a major restoration project was completed in the Kilpatrick Pond segment of the preserve. This project involved dredging and rechanneling parts of the stream to reduce sedimentation and decrease water temperature throughout the creek. There were some concerns that this alteration to the streambed could negatively impact aquatic insect populations. As a result, the USGS was commissioned to monitor both the quantity and bio-diversity of insect life in Silver Creek. In order to do this, artificial substrates or "bug condos" as we called them, were placed at 7 transects upstream, downstream and within Kilpatrick Pond. When it came time to retrieve the substrates this summer, Mallory, Sunny and I were all enlisted to help. The work was meticulous, and somewhat grueling in the hot summer sun. We would often spend upwards of half an hour cleaning a single substrate in an attempt to gather every single nymph, midge and leach we could. The samples we collected were then sent to an etymologist for identification and analysis.

Although the data we were collecting during water monitoring and the aquatic insect study is critical to managing the Silver Creek ecosystem, it was often easy to get lost in the beauty of the place while working. Along the way we would often spot deer, moose, and countless numbers of birds. When not focused on the terrestrial wildlife, we would stare intently down at the creek, hoping to catch a glimpse of a monster trout resting in the shade of a willow or holding in a deep hole.

I feel incredibly fortunate to have been given the opportunity to take part in professional level research and conservation projects this summer, and I am certain that my experiences at Silver Creek will play a vital role in shaping my academic and professional future. The technical skills I learned while participating in research and monitoring at Silver Creek will be invaluable when it comes time to find a job or apply for graduate school. More importantly, however, the joy I found in doing meaningful work in a beautiful setting has convinced me that a career in field sciences and conservation is what I am meant to do.

It wasn't just my own work experiences that inspired me this summer. Every person I met in Idaho, from the local ranchers and farmers to Mallory, Sunny and the staff of the

Hailey office were all deeply passionate about conserving wild spaces in the state of Idaho as well as around the globe.

Prior to this Summer I had spent countless hours on river banks, in forests and floating on lakes, but I never truly understood or really even thought about what goes in to making sure places like Silver Creek remain wild and available to all. This summer, however, the full scope of what is required for successful conservation and wildlife management became clear. It takes people like Sunny and Mallory to act as "boots on the ground", monitoring water levels, maintaining trails and developing relationships with landowners. It takes people like Jerry, Cheryl and the other visitor center volunteers whom are willing to give up their time to help educate the public and inspire people to care about protecting nature. It takes people like Dayna, Nancy, Clark and the rest of the Hailey office staff to handle the business, bureaucratic, and logistical aspects of conservation. It takes landowners like the Frenchs and Molyneuxs, whom are willing to set aside parts of their farmland as protected areas through conservation easements. Most importantly, however, it takes a public that cares. A public that sees the value of conservation and is willing to do whatever it takes to ensure places like Silver Creek will be around for generations to come. Therein lies some of the value and beauty of Silver Creek. It is a place the makes people care. Whether you visit Silver Creek to cast a line at a wary trout, observe wildlife from the tiniest songbird all the way up to the largest moose or simply to be in nature and reflect, it is impossible to not be affected by your time on the creek. After seeing a shimmering rainbow trout rise to a mayfly or watching the sun sink behind the Picabo hills one cannot help but develop a reinvigorated appreciation for nature and a desire to do whatever possible to protect it.

Like everyone that visits Silver Creek, the creek has changed the way I think about nature forever. Prior to my time at Silver Creek, I believed nature was worth protecting, but primarily saw its value in its opportunities for human use and recreation. After this summer, however, I see that I was misguided. The value of a place like Silver Creek is intrinsic. Places like Silver Creek are valuable in and of themselves, and the world would be far worse off without them.