

Charlie Blumenstein Water and Wildlife Conservation Internship
Caley Gallison Personal Reflection

Silver Creek Preserve is a place that you cannot fully understand until you have walked the narrow trails, canoed the meandering creek and looked over the Preserve in the early morning light. It is a place where the beauty keeps growing the more time you spend on the creek, a place I slightly took for granted until after I left. I always feel like I learn a lot in college classes but I learned even more this summer in every way imaginable.

One of the most memorable things about Silver Creek is the light, especially in the evening. I have never seen a light quite so stunning. My favorite part of everyday was walking outside of the intern house after cooking dinner and looking out at the golden light encompassing the fields and creek and listening to the birds in the large willow tree chirping. Such beauty never ceased to amaze me.



Silver Creek Preserve with Sun Valley to the North.

This summer was a summer of firsts. I have never laughed as hard as I did at times during my three months on the Preserve. I have also never been as terrified as when I nearly ran into a mama moose, alone in a canoe on the creek and quivered for a half hour waiting for it to leave and hoping it was not angered by me. I have never seen as many hawks and owls as I did every day just during the drive to work or on my evening run. I have never heard so many western meadowlarks, my favorite bird, as I did in the first month. Before this summer, I had never mowed a lawn, a sad but true fact, and never driven a manual truck. I had never snorkeled in a river or swam in an oasis in the middle of the desert. I had never really fished before. I had never spent so much time alone. I had never lived in a place with so few people. I had never seen a sandhill crane. The list goes on and on.

Life on the Preserve was relatively methodical. After my first initial hectic week of introductions and confusion, I got the hang of the daily pattern at the Preserve. The Preserve Manager, Dayna Gross, would always write out a task list for Rydell Welch, the conservation technician, Sunny Healey, the assistant manager, and me each Monday morning. Throughout the day, we would complete and check off some of the items from the list, a process that worked well for the three of us. If there was ever a day when Dayna had forgotten to write a list, we would make one ourselves because it helped us keep track of what we needed to do and what we had accomplished. The most common tasks on the list included changing the water and soap at the cleaning stations for preventing the spread of the invasive New Zealand mud snail, watering the three newly planted aspen groves, weed-wacking overgrown trails and water monitoring.

Water monitoring on Silver Creek occurred twice a month and was one of my favorite things we did. Two of us, most often Rydell and I, would set out in leaky waders and oversized holey wading boots, pick up a canoe, all our gear, and then put in at Stalker Creek. We learned quite quickly, from experience and learning from past interns, that canoeing to each of the monitoring sites was much more efficient than driving and walking. And, it was more fun! There were five transect sites set up on the creek where we would take measurements of flow rate, stream width and depth, dissolved oxygen, pH, temperature and turbidity. Monitoring often took all day and in the beginning, Rydell and I would always forget something or have some sort of mishap throughout the day like forgetting to take a measurement, not bringing enough water or food or narrowly dodging a fisherman. However, we eventually got the hang of monitoring and no longer had “amateur hour”, as we liked to call it. I had performed similar water tests before in my biology classes so really enjoyed the practical experience of water monitoring. It was interesting to see the differences in the creek throughout the summer, especially the fluctuations in water depth and velocity, measurements the fishermen were always curious about.

We had the wonderful privilege this summer of participating in a United States Geological Survey (USGS) and Idaho Fish & Game (IDFG) fish electroshocking survey that occurs every three years. I had already been introduced to this fish survey technique in my Animal Ecology class at Colorado College before but we performed it on a whole other scale. Electroshocking involved the use of a boat that was hand-crafted to serve the study, with a generator on it that connected to two circular probes that extended from the boat. The charge on the probes attracted the fish until they got close enough when it would temporarily stun them. I was a bit worried about the humaneness of this technique, but was surprised to see that few fish were hurt and they were mostly handled very carefully. It is also the least invasive technique for getting data on fish, data that is integral to the productivity of the trout population at Silver Creek.



Water Monitoring

The first few electroshocking days we participated in were done in waders as we tromped through the creek with several other volunteers, netting fish off of the two probes and depositing them in a live well in the boat. Sunny and I were paired with a fish technician who was aptly named “Stretch.” We had to run after him to try and net the fish he stunned, all the while trying not to fall into the creek and get shocked ourselves. We laughed about how ridiculous it all was and how quickly Stretch could move.

Later on, we progressed to electroshocking at night because it is easier on the fish because they can recover quicker. The one night I electroshocked, we started at 10 pm and did not finish until three in the morning. It was also one of the coldest nights yet that summer, dropping below freezing. Despite being extremely cold, and being the only person who was not with IDFG, I got to help out and learn a lot. After finishing up and getting dropped off at my truck, I was confronted with the presence of three moose! Damien, another fish technician, honked at the moose to scare them off and dropped me right at my door. However, after they left, I realized my windshield was frosted over. I quickly and timidly ran outside the truck and scraped off as much ice as I could with a plastic glove I had found. It was quite the end to an exciting night. I was exhausted the next day but had plenty of stories to tell to Sunny and Rydell.

Electroshocking was one of my favorite things we did this summer because it was exciting to see all of the different fish that inhabit Silver Creek and participate in such a large scientific endeavor. I had no idea that so many fish lived in Silver Creek, that so many fish eluded the fishermen. We got to help process the data each time which involved handling the fish to measure them – an experience that was one of the coolest things I have ever done. I would love to work with fish in a conservation setting in the future and know that my experience electroshocking this summer will come in handy.

I came to truly appreciate Silver Creek after my first solo canoeing excursion to complete my research project on macroinvertebrates, better known as stream insects. I was collecting data on the abundance and diversity of macroinvertebrates at four of the five established monitoring sites in Silver Creek to gain more information on water quality.



Macroinvertebrates and vegetation in a sampling container

I was excited about performing a solo research project on something I was really interested in, but also nervous about completing it entirely alone. The first morning of my project, I put my canoe in at Stalker Creek, a tributary of Silver Creek, and waved goodbye to Rydell who had dropped me off. Little did I know, I was about to experience the true wonders of the creek. I had never canoed anywhere solo before, so was a bit nervous when I set out, mainly about navigating and steering myself through all of the windy and narrow bends of Stalker Creek. It was amazingly quiet and within minutes of putting in, I saw my first wildlife – a lone deer standing in the fog on the hillside. I stopped paddling and we stared at each other for nearly a minute, a magical time where both of us were mesmerized by the other. After a while, I continued on to my first survey site, completed my research with few complications, and then paddled to the next site. A few minutes after I had left the first survey location, I turned a bend in the creek only to be abruptly confronted with the presence of a moose 20 feet ahead of me in the middle of the creek. I was terrified and immediately started back paddling as quickly as I could, while my heart rate shot up. The moose stared at me and then quickly stepped up on to the shore. After I had paddled backwards a good ways, but still in sight of the moose, I sat quivering against the shore and then got out of the water on the opposite shore. The moose stayed and ate for nearly 30 minutes, sometimes in sight, but mostly out of sight. The whole time, I was on edge because I had never been alone with a moose, such an unpredictable animal, before, and did not know how dangerous it was. Only after I had called Sunny and asked for advice and then passed the area and shouted “moosey, moosey, moosey” for 20 minutes while paddling was I able to truly appreciate the experience, and let out a giant sigh. I encountered a moose head on and before this summer, I had never even seen a moose before! After this encounter, I did not want to see a moose for a long while. However, a few weeks later, while canoeing the creek with Rydell, we managed to see five moose in a 20 minute period, another quite exciting and terrifying experience. I feel very lucky for having sighted so many moose this summer, despite the terror they caused me. Every time, I was amazed by their likeness to horses and their grace. They are regal creatures that value and need the creek as much as the fish, macroinvertebrates, fishermen and interns.

One of the most exciting tasks we performed at work was a snorkeling survey. I have been snorkeling many times, but never in a shallow, well-vegetated creek in the middle of a landlocked state. For our first survey, we hiked in to the creek from the road in our bathing suits and then put on full body wetsuits, including a hood, boots and gloves, all in the middle of the high desert, in 90 degree weather. How ridiculous! Immediately after suiting up, I had to dive into the water because the ambient heat was way too much to handle in a couple inches of neoprene. Once we hit the water though, I did not even think about anything other than counting the fish. I tried to count every single fish I saw, while simultaneously avoiding the chara and other overgrown plants. We had two snorkelers surveying and then one person in a float tube, who tried to decipher the words shouted out of snorkels to record fish numbers. At times when snorkeling, I forgot where I was completely and would only remember when I surfaced and realized I was swimming in a foot of water and could not extract myself from entanglement in the plants. Counting fish in the very silty Kilpatrick pond was incredibly difficult but very exhilarating and we came to understand the places where fish were most likely to be seen. Through electroshocking, snorkeling, and canoeing the creek, I learned a lot about fish, and especially the fish in Silver Creek.



Sunny and me, preparing to snorkel.

I grew up in a city and go to college in a city. Never before had I lived in a small town, let alone a 100-person “town”. Picabo terrified me at first because I knew no one and felt incredibly isolated by its size. Nevertheless, by the end of the summer, I got overwhelmed by the 8,000 person town of Ketchum and would rush back to the comfort of Picabo and John and Elaine French’s little red house after going grocery shopping in town. The French’s kindly let the interns stay in their house that is six miles from the Preserve, two miles from the Picabo store, and two miles from a wonderful swimming hole at Martin Bridge. One of my favorite moments from

living at the French’s house was watching the famous Brown Drake (a type of mayfly) hatch. Sunny had warned me that Picabo would be really busy during the hatch but I could not believe her. I only ever saw 1-4 cars drive by in a night. I was heavily surprised, however, when cars kept streaming by, chasing the massive drake hatch that cause the trout (and fishermen) to go crazy. We called Silver Creek “downtown Picabo” during the nearly week-long hatch. The best part of the hatch, though, were the drakes, illuminated by the evening light, glistening in the sky, and trout jumping to get a bite to eat.



The French’s house during a beautiful sunset.

I was constantly busy at work, but I also loved the random moments of down-time that would occur throughout the day – eating lunch in the truck or canoe, chatting with the volunteers or fishermen, playing with Dayna’s kids (Ben and Abe), petting the two resident dogs (Lucy and Hailey) or watching a hatch of flies. I really learned how to better interact with people this summer. I am normally a bit shy so have never been an outwardly friendly person. However, this summer on the Preserve, I came out of my shell and greeted numerous fishermen, visitors and struck up random conversations with people all over Picabo and the valley. I miss waving to complete strangers on dirt roads and stopping in the middle of something you are doing to have a half hour-long conversation.

I could not have had such an amazing time this summer without the people who contributed to my experience, who I would like to thank. I spent numerous hours of everyday with Sunny and Rydell – working and living with them – and they helped keep me sane. Sunny was always upbeat and taught me a lot on and off the Preserve. Rydell and I, both new to the Preserve, would flounder together, making ridiculous mistakes and laughing the whole time. Some of my favorite memories were of going to swimming holes nearly every day after work and getting refreshed after a hard day of work. I also always enjoyed stopping by the visitor center while at work and chatting with the several volunteers always stationed there. Cheryl and Jerry were seasoned volunteers who knew more about my job than I did and were always happy to visit over their five weeks at the Preserve. The other volunteers spent less time on the Preserve but were still integral to my experience – Leroy and Ronile, Chad, Art, Cheryl and Ralph, and Vicki and Bob. Most of all, Dayna enabled my entire experience at Silver Creek to be successful. Dayna knows and loves the Preserve better than anyone. She has had numerous interns come and go but still managed to find the time to interact with and get to know me. Dayna was incredibly busy at the beginning of the summer with a project concerning the restoration of Kilpatrick Pond but she was still aware of our daily happenings and took time out of her day to check in.



Me, Sunny, Rydell and Dayna on the Preserve

Out of all the people who enabled me to have an amazing time this summer, I would most like to thank Sara Blumenstein and the rest of the Blumenstein family. Without the generosity of the Blumenstein family and their desire to forward Charlie’s love of Silver Creek and the environment, this opportunity would not have been possible. I am eternally grateful for being chosen for such a life-changing internship that was in Charlie’s name. I feel lucky to have spent a summer at Silver Creek Preserve working with The Nature Conservancy and experiencing Idaho’s beauty. I have always been interested in conservation but now feel confident that I will pursue a life-path that leads me to support conservation aims and spread my love, as well as Charlie’s, for the environment.