

Silver Creek Summer 2014 Molly Broom

Summer on Silver Creek is a magical time. The cool, quiet morning air vibrates with the calls of wrens and killdeer and fades into warm afternoons. Looking back, it seems so cliché to say that it was an incredible summer of learning and growing as a person, but honestly, that's exactly what it was. I met amazing people, learned about conservation, science and fishing and explored Idaho. I'm so grateful to have had the opportunity.

The theme of my summer on Silver Creek was "outsmarted by nature". To start, the red intern house was overrun by mice that were most definitely more intelligent than me. Every night we would set traps only to find the peanut butter bait gone and mouse droppings on the counter. They had essentially tricked us into feeding them.

And the trout, don't get me started on the trout! I had never really fly fished before coming to Silver Creek. The first few times I went fishing I floundered hard; I tangled the line on every cast and I didn't know how to tie any knots. Sunny, the Preserve Manager, helped me learn how to cast and gave me a general idea of what to do. Throughout the summer, I picked-up more and more tidbits from guides and visiting anglers. "At Silver Creek you cast downstream so you don't spook the fish". "You need to use a way longer leader". Uh oh, I had been doing it totally wrong. My big break finally came when I was fishing on the Big Wood River. My fly floated down to the end of a small riffle and as I went to cast back upstream there was a tug. I ended up landing a small rainbow but it felt like I won a million bucks. I guess

sometimes you just need a bit of luck.

I continued to fish in the evening but to no avail. I did however see some amazing wildlife during those quiet nights on the water. I was once walking up the trail when I heard a rustle across the creek. I looked up to see a massive cow moose staring right at me. The narrow stream didn't seem like much protection so I froze and backed up slowly. The moose grunted and continued to eat the willows along the bank. I let out the breath I hadn't realized I'd



First catch on the Big Wood River

been holding and headed back up the trail, ecstatic I'd seen such huge creature up close.

Beyond learning about the ecology of Silver Creek, my job required helping with the general maintenance of the Preserve including spraying noxious weeds, cleaning and water monitoring. I'm really interested in water resources and hydrology, so water monitoring was one of my favorite parts of the job. Water monitoring always meant a long day in damp waders, but by the end of the summer Sarah, the other intern, and I had an efficient system in place. Water monitoring at Silver Creek measures discharge (Q) which quantifies a volume of water moving through any given point at one time. This is measured in the English units of cfs or cubic feet per second. We also measured dissolved oxygen levels and water temperature.

Water monitoring became vital this summer as temperatures soared and water levels dropped to unprecedented levels. Blaine County declared a "drought emergency" after low levels of precipitation, low winter infiltration and high temperatures caused water shortages. It became apparent that we would have to be very vigilant with water monitoring in order to protect trout and the ecosystem of Silver Creek. After recording DO reading of below 6 mg/L several mornings in a row, Sunny made the bold decision to restrict fishing access from 10pm till 10am. This prevented too much stress on the fish early in the morning when levels were at their lowest after a night of aquatic plant respiration. Not until plants could start using sunlight to reoxygenate the water were the trout safe. The restrictions were met with a mostly positive response; outfitters and guides wanted to protect the fish just as much as we did.

For my independent project, I compiled a Water Monitoring Manual as a resource for future interns and volunteers. The document explains the procedures of water monitoring as well as the hydrologic theory behind it. I hope this will help keep data consistent into the future as water shortages in the West become even more dire. This work showed me how hydrological science can be utilized by conservation organizations.

Another highlight of the summer was getting to work at the Flat Ranch Preserve. The Flat Ranch is a 20-year-old Nature Conservancy property in Idaho near West Yellowstone. The Flat Ranch operates as a working ranch but practices sustainable rotational grazing in order to protect the often over-looked grassland prairie. A branch of the Henry's Fork River also passes through the property and has been restored by TNC. Riparian restoration and diversions have returned the stream to its natural meander which was destroyed when the stream was channelized generations ago to facilitate irrigation.

The Flat Ranch was not only an opportunity to see how a different TNC property is managed, but also a chance to meet some remarkable people. Preserve Manager Matthew, his wife Stacey and son Quinn were not only welcoming but great examples of an entire family's commitment to conservation.

We spent the week preparing the Flat Ranch for a big anniversary event. Using a rickety, rented lawnmower we created an open space for a band and catering tent. We also gave the place a makeover with a deep clean and new coat of stain on the Visitors Center. The event celebrated the conservation of the Flat

Ranch, and highlighted the collaborative work of TNC throughout Idaho. Lou Lunte, Deputy State Director of TNC in Idaho, gave a humble speech about the origins of the organization and its work but I was impressed by what he didn't say. TNC had the courage to purchase this piece of ravaged grassland (a not-so-trendy type of land) and nurture it to become a thriving ecosystem.

The cool, sweatshirt-wearing evenings at the beginning of the summer melted into blazing hot days. Sometimes after work I would cook dinner in my bathing suit and have to run through the irrigation several times during the process in order to stay cool. Dusk was the most beautiful, and active part of the day. Raptors would swoop over the fields and across the creek on their search for prey while trout would begin to rise for the nightly hatch. The sun would slowly sink behind the hills as coyotes would yip to each other in the hills behind the house.



Summer solstice sunset on Silver Creek

I arrived at Silver Creek not knowing how to drive a manual vehicle. The trusty white preserve Ford took quite a beating with my unfamiliar hands and feet. About three weeks into the summer, the clutch blew out. I felt horrible but Conservation Manager Dayna Gross and Sunny assured me that several of the past interns had also learned to drive stick on

that truck and it was cumulative damage. I'm still not sure of the validity of that statement, but I did end up learning how to drive stick and enjoyed cruising through the Preserve in the white truck. I also learned how to use several other machines during my time at Silver Creek. I learned how to operate and troubleshoot everything from ATVs, water pumps, lawn mowers and weed whackers to dissolved oxygen meters and GPS units.



Using the ATV to fix some fences on the Preserve

So many people have a stake in the ecosystem of Silver Creek. Surrounding landowners rely on the spring fed water for irrigation, guides and outfitters make their livelihood guiding tourists, anglers come for sport, the community uses

it for recreation and education. This summer I learned a critical lesson about how the Nature Conservancy does its best to protect this delicate system by engaging all of these stakeholders. Listening to each voice ensures diverse viewpoints are heard. This way, everyone has an investment in responsible management and preservation.

I was extremely lucky to have met some remarkable people. Each and everyday I worked under the leadership of two awesome women, Dayna Gross, the Conservation Manager, and Sunny Healey, the Preserve Manager. The other intern, Sarah Long, and myself would try to accomplish a list of tasks given to us by Sunny before the day was up. While I loved working on the Preserve, it was fun to see the big projects Dayna was working on. Her work involved endless collaboration with landowners, corporations and government agencies in order to further conservation. Much of her work was in easement management which I found out is at the heart of TNC's strategy at Silver Creek. Easements allow landowners to manage and control land use on their property, but also ensures the protection of that land to future

generations. This is vital to the areas around the Silver Creek Preserve because it allows many more acres of land to be protected and conserved than would be possible if every acre was owned and managed by TNC.

Sunny didn't tell me that this summer was her first year of Manager until the very



Summer 2014 Staff. From left: me, Sunny, Sarah, Caroline, Dayna

end of the summer. I would have had no idea if she hadn't of told me because she was such an effective leader. She also had to make the extremely difficult decision to restrict fishing access, a restriction that hadn't be used in over 10 years. Sunny also ended up being a fantastic housemate, friend and role-model.

Other people also influenced my summer at Silver Creek. The volunteers that dedicated their time to Silver Creek were all wonderful people who were welcoming, funny and gave great life advice. John and Elaine French were not only gracious by letting us stay in their red farm house but also incredible advocates of conservation (and really cool people!). Sarah, the other intern, is a hard worker, accomplished birder and great co-worker. We also collaborated with other agencies including the Wood River Land Trust and Idaho Fish and Game which was



Enjoying the Big Wood River with Sarah Blumenstein

an opportunity to see other organizations at work.

I know its cliché to say that I learned a lot about myself this summer but its entirely true. I'm especially grateful to the Blumenstein family who made the opportunity possible. Their dedication to the Silver Creek Preserve and Colorado College

has allowed people like me to have an enriching, exciting

and meaningful summer experience. I gained experience working for a large, influential organization, was able to focus my interest in earth science and explore a new part of the country. I was so grateful to have met Sarah Blumenstein at her home in Ketchum. Her humor and positive nature are infectious and her commitment to Silver Creek and this internship are deeply appreciated. Thank you so much for this opportunity.