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I spent the summer of 2020 working for the Utah Forest Institute (UFI) as a Field Technician. I enjoyed the work as I got to not only spend my time in Utah's forests but gain first hand knowledge on the impacts of fire – a subject I am very interested in. Once the field season ended and the fall 2020 semester began, I continued my involvement with the UFI by enrolling in an internship under the supervision of the Senior Technical Analyst, Megan Nasto. Megan and I discussed my interests and her expectations, and together we agreed upon five objectives for the semester long internship. 1) Learn how to code in R, 2) Become proficient in ArcMap, 3) Familiarize myself with geospatial statistics, 4) Familiarize myself with

Having a good time analyzing a fire for burn severity in the Utah Forest Institute office!

remote-sensed imagery, and 5) Gain a more in-depth understanding of fire ecology. We chose these five objectives as we both felt they would be critical to my success not only as a student in the S.J. & Jessie E. Quinney College of Natural Resources but in my future appointments, as well.

I spent the first four weeks of internship digitizing the field data collected during the summer 2020 field season. Once this task was completed, I transitioned over to the main work that undergraduate students contribute to – conducting burn severity analyses of fires for the incorporation into the UFI's Utah Fire Atlas. Specifically, I learned how to use Landsat satellite imagery and ArcMap to visualize a landscape both before and after it burned. I also learned how to code in R to compute various indices of burn severity from the satellite imagery. In all, I analyzed 27 fires that burned across a range of Utah vegetation types. This work gave me a better understanding of how, where, and when fires burn in Utah.

Having this computer-based knowledge of fire provided me with a perspective of that is complementary to the one I gained in the field, which is of personal interest to me. From an academic standpoint, though, the internship provided me with the basics I needed to immediately succeed in my R- and ArcGIS- based courses. In the future, I'm confident I will be a much more competitive graduate and be able to apply this knowledge and these skills to a career in fire.