Across the Rocky Mountain West: A Summer with the 2023 Public Lands/Dark Skies Survey Team

By Alison Mueller-Hickler '26

Loveland, Colorado | Photo by Macy McCauley '25

My summer with the 2023 Public Lands Survey Team was nothing short of eventful as we traveled across all eight of the Rocky Mountain West states. Joining Nathalie, Brigitte, Lily, Liam, and Jesús in the field brought along a variety of experiences. From seeing Monument Valley in Utah jam-packed with tourists reliving an iconic scene from Forrest Gump to getting a 12-passenger CC van out of the sand at Lake Powell, there was never a dull moment.

We started our work in Block 8, spring 2023, when we met Corey Hutchins of the Journalism department. Corey provided meaningful insights concerning journalism and interview processes. During these meetings, I observed the nuances of interviewing and how getting an answer is usually dictated by what a person is doing or the use of certain words that discourage participation. Outside of interview preparation, we worked to schedule our trips during the summer, taking into consideration a sense of place, and researching the area and the people who live there. We ended up with three trips averaging around five days each with a two-week fourth trip to finish up the summer.

The first trip taught us the importance of flexibility. We left the Sustainability House at around 2:30 pm on Friday, June 16th with a van stuffed with food and supplies.

Our goal for the following five days was to learn from Denver Post reporter Bruce Finley, practice to the art of interviewing, and get our first interviews.

On our way to Westcliffe, Colorado we drove through hills and valleys densely populated with nourished trees from the recent rainfall. Every few moments, Cyndy would turn down the music and point out the window to identify popular trees like Aspen, Douglas fir, and Juniper and tell us how to identify them based on shape and leaf color.

At around 5:30 pm, we arrived at the Finley family cabin, a gorgeous redpainted wood structure with a large deck and upstairs patio overlooking the valley below. Staying true to the cabin theme, it also had a plethora of bear decorations hidden around. We settled in and Nathalie, Lily, and I took a short hike to explore the nearby campsite while Liam and Jesús started preparing dinner.

After dinner, we decided to do some night-time work and plan for the next day, training day. This training day was



Team selfie! (Left to right: Jesús Lara Rivas, '25 , Liam, Mullen, '26, Cyndy Hines, Brigitte, Arcoite, '24, Alison Mueller-Hicker, '26, Nathalie San Fratello, '25, and Lily Frost, '26. | Photo by Lily Frost

special because for the first time Lily, Nathalie, Brigitte, Liam, and Jesús would interview people. This planning also came with the first of many changes in our trip's schedule. Due to heavy rain in the area, we decided to stay another night at Bruce's, which was difficult to accept at first, as we were so excited to visit more new places.

The next morning, we all squeezed around the wooden table to learn from Bruce. We built upon what we had learned from Corey in Block 8 and added into consideration length of discussion. The best part was that after a 10-minute break, Bruce and Cyndy would demonstrate how it was done. Their five-minute interaction was hilarious and engaging and showed us that it is okay to make mistakes during the interview.

At 11:30 a.m. it was finally interview time! We filed into the van and Bruce directed us to our first interview site, the Comanche Trailhead at San Isabel National Forest. As we pulled in, we immediately saw two people sitting next to a map of the trail, and we knew they would be our first interview. However, what we did not know was that it was going to start pouring rain and we would have to conduct the interview under the cover of the restroom stall. Bruce began the interview and quickly let the team take over with Lily, Nathalie, and Brigitte taking charge. We learned that they were a trip leader and a student from the Outward Bound School in Leadville. The trip leader, Tanmay Bain, was delighted to help the team with their survey and even stuck around to discuss Brigitte's personal project with her!

After this interview, our confidence was soaring. I thought that, due to the rain, we would have a tough time finding people, let alone people who would agree to stand in the pouring rain to answer our questions. It was a nice surprise to be wrong. There were often hikers and runners coming off the trail who would enthusiastically answer our questions. It was quite the scene because we had taken shelter from the rain in our van, and



Jesús Lara Rivas, '25 and Liam Mullen, '26 preparing mangos and steak for some dinner-time burritos. Photo by Cyndy Hines

whenever someone came within sight, one of our team members would say "I've got this! Does someone want to come with me?" and they would jump out of the van to approach the hiker.

At the end of our rainy hour at the trailhead, we had completed 10 interviews and received no rejections, which was spectacular.

After a couple hours, the team decided they wanted more action, so we once again piled into the van and drove to the town of Westcliffe, an International Dark Skies Association certified area. Finding people to participate in the survey in town was a lot more difficult than at the trailhead. Immediately, Nathalie and Liam experienced rejections. I thought that experiencing rejection was going to be difficult on the team's moral; however, they took it in their stride and immediately searched for another person. Conducting their interviews, the team appeared as though they had been doing this for a long time and today was not their first day. By the end of our session in town, we had collected an estimate of 37 interviews.

That night, we layered up and drove to the Smoky Jack Observatory. The first thing I

noticed was the usage of red light in the telescopes which I had never seen before, but Jesús had. He explained that it was used to see at night as an alternative to white light because it affected our vision and eyes less harshly, so we could see the stars more clearly while not contributing to light pollution. This method spoke to the town's commitment to preserving the dark sky. We were able to look through a series of telescopes to see the different constellations and galaxies. interviewed some of the hosts and volunteers, and the consensus was that the event was definitely worth staying up late.

The next morning, started the long drive towards Mancos State Park campground, which was right next to a beautiful lake. We set up our tents and decided to let everyone explore for an hour or so before cooking dinner. Liam and I went on a trail run around the lake which included getting lost several times and even crawling under barbed wire! Brigitte also went on her own run, Nathalie and Lily went to see if they could swim in the lake, and Jesús went on a hike. Afterward, we sat under the stars and drank hot chocolate. It was a very peaceful moment when we decided instead of rushing onto the next location we had planned, Gunnison, we would skip it all together and spend a day at Mesa Verde National Park and the surrounding towns.

The next morning, we had a nice quiet breakfast and drove to Mesa Verde. However, interviewing would look different because we were on National Park Service grounds and did not have the documentation to survey within National Parks (a program which we opted out of because we believed that wearing neon vests with clipboards would not help attract participants), so we decided just to have conversations with the park-goers, while not taking any notes, and asking for their contact information to follow up later.

After our day at Mesa Verde, we visited a giant Folk Art stand on the side of the highway. Everywhere you looked there



The 2023 PLSDS team on a canyon hike at Mesa Verde. Photo by Alison Mueller-Hicker, 26.

were these crazy, huge wood carvings of popular figures like Obama and the Lorax, and animals like bears and raccoons. We talked to the owner and designer of the folk art, Dave Sipe. He said that seeing the stars in the sky was very important to him and that he lived by the phrase "more love, less gov."

On the final day of the first trip, we visited Durango and Chimney Rock National Monument where Nathalie talked to a ranger who stated that accessibility was an interesting issue for parks and monuments because decisions had to balance making them for everyone while also preserving the area around the trail. The Chimney Rock ranger also stated something similar to a ranger at Mesa Verde. That the National Park Service has been facing increasing demands that they preserve dark skies and promote educational programming. This is mainly rising from the recent tourist interest in protecting dark skies and being able to see the stars; a core issue that we are surveying.

Trip 2 was the most chaotic of them all. The plan was to go to several locations in Utah and Arizona to interview a variety of people for both the team's main and individual projects. It started with an unexpected delayed start by a day, therefore cutting the trip short and forcing a re-evaluation of the locations we wanted to visit. This re-evaluation was followed by not being able to find anyone to interview and the van getting stuck in the sand at Lake Powell.

On Wednesday, June 28th, we finally were able to leave. Everyone was super excited and packed the van quickly to get as much of an early start as we could for the ninehour drive ahead of us. As we entered Arizona, we listened to ABBA, making it a

mini dance party at the end of an extremely long and tiring drive. That night we camped at Valley of the Gods, right below the Lady in the Bathtub Butte. The next morning, we packed up and drove to the town of Blanding. We got a handful of interviews at a Native American Arts and Crafts store. One of the most notable interviews was with a Navajo woman who worked behind the counter and a nearby gas station. She was very surprised that we had asked her to participate in the survey because she said no one had ever asked for her opinion even though she has lived on those lands all her life. She also showed us some beautiful photos taken of the area. When we were finished, we decided to drive towards Lake Powell hoping to find interviews at the campsite and in Page, AZ.

On our way there, we finally caught a break! We saw a bunch of people congregated on a piece of the highway taking pictures and a couple of jewelry stands. We pulled over and realized that the reason this place was so packed, other than it being Monument Valley, was because it was Forrest Gump Hill, and that everyone here wanted to take a picture. It was amazing to see the impact a movie has on society making this hill in Utah a popular tourist destination.

At Monument Valley, Nathalie inter-



Liam Mullen, '26 admiring the rocks on the side of the canyon. Photo by Alison Mueller-Hicker, '26.

-viewed a couple of the Navajo vendors about the way they interpreted the stars and the night sky, and how their perspectives were different than ours.

Liam attempted to interview one of the three bikers on massive Harley-Davidsons wearing a Trump 2020 shirt but got turned down. However, Liam did end up getting a short interview from a Polish man who had come in a large group. During the interview, he stopped Liam for a second, took out his phone, snapped a picture of the motorcycles, turned to Liam, and said "Oh, so American."

At Lake Powell, we followed Cyndy to the beach where there were a hundred RVs were parked on the shoreline. It was fascinating to see all trucks and RVs and no tents. Next thing we knew, the van sputtered and then wouldn't move no matter how much pressure Nathalie put on the pedal. We were stuck.

We started to shovel out the sand with our hands and once we felt like all tires had some reasonable space we told Nathalie to try to drive. Unfortunately, every time we did that the van only went a couple of feet and then stalled and sank. I decided to go find some shovels or someone to help pull our van out because



Nathalie San Fratello, '25 looking at the horses in Utah. Photo by Lily Frost, '26.



2023 PLSDS Team at Valley of the Gods. Photo by Cyndy Hines

it looked like there were more than enough. A couple lent us some shovels and offered to help us. We took most of the air out of the tires to help with the sinking, and the couple brought their truck over to see if they could wench us out. Next thing we knew, there was a giant, raised truck bouncing on the sand coming right at us. The couple driving it attached us to the truck and drove. We all pushed with all our might and then the van started rolling and then it was gone. We ran after it, cheering happily, and watched them drive it to the hard sand. We were grateful for all their help.

For the rest of the trip, the team would visit Horseshoe Bend, Dinosaur Tracks, Four Corners Monument, the Durango Farmer's Market, and Treasure Falls.

Throughout the summer, we continued to improve on our interview skills and gained confidence. The presence of a student group in the Mountain West states serves as an important reminder of

the necessity to corroborate online and telephone surveys with data collected in person. Beyond the survey's goal of gauging the individual characteristics of park attendees, how they recreate in the parks, attitudes toward climate change, and other conservation topics, it is important to recognize the voices and communities that are underrepresented and marginalized concerning access to recreation and in data collection throughout the region.

During my time with the PLSDS team members, I had the opportunity to learn that a survey is dramatically impacted by the people conducting the interviews, so here are a few things I learned about Jesús, Liam, Lily, Nathalie, and Brigitte.

Jesús is a major team player and one of the most caring people you will ever meet. He always thinks of others and truly believes that everyone has the capability of doing anything they put their mind to. He is a great teacher and listener. When I told





Top: The crowd at Monument Valley / Forrest Gump Hill.

Bottom: Forrest Gump Hill at Monument Valley. Photos by Cyndy Hines.

him I had never built a fire before and asked if he could show me, he said that not only was he was going to instruct me how to do it, but that I would build it by myself! It gave me so much confidence and I actually did it!

Liam is goofy and enjoys finding interesting trails. He knows how to make everyone laugh and will bring you on trail runs that are so amazing you forget you got lost because of his misdirection.

Lily is calm, reliable, and relatable. I feel like I can always count on her to get an honest opinion. She also has the most amazing talent for flower identification and will try to identify any flower you ask her to on a hike. She has a cool magnifier for her camera to pay attention to detail on the plants.

Nathalie is the most spontaneous and energetic person. She knows how to make you laugh. She enjoys the little things and it is so easy to feel like you have known her for years. She has a passion for fashion and up-cycling.

Brigitte is motivated and intelligent. It seems like she is involved in everything on campus and is incredibly knowledgeable. Her connection to public lands and outdoor recreation makes the project a thousand times more meaningful. She is also a bird watcher and loves to identify birds from far away. I have never really found birds that interesting, but now I pay more attention to them because of Brigitte's passion.

This summer experience with the Public Lands Survey team was enriching, memorable, and rewarding.



RVs around Lake Powell | Photo by Alison Mueller-Hickler, '26

Meet the 2023 PLS Team



Corey Hutchins is the co-director of the Journalism Institute at Colorado College. His work has appeared on the cover of The Nation, The Washington Post, Slate, The Daily Beast, and The Texas Observer, among others. Corey Hutchins started working with State of the Rockies last year by teaching the Public Land Survey team how to use the journalistic method in the field. He joined the Public Lands Team because it is a great opportunity for students who are interested in putting their journalistic research and interviewing skills into practice in some of the most beautiful places in the West.



For most of her childhood, **Brigitte Arcoite** '24 knew no connection to our natural world as she had grown up in a relatively dense metro area in Norwalk, CT. This all changed when she was introduced to a small state-funded wilderness therapy-like program tucked away in the woods of northern Connecticut. Brigitte's rigorous involvement in this reciprocal environment helped her discover her passion for environmental advocacy alongside a community-engaged approach. She is eager to explore this passion in a new way alongside State of the Rockies.



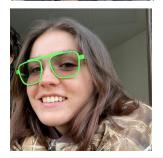
Lily Frost '26 is from Berkeley, California and pursuing an organismal biology and ecology major. She is interested in human interactions with the natural world and minimizing our impact on different ecosystems. The dark skies public lands survey is a combination of her conservation and journalism interests and an opportunity to form a qualitative understanding of recreation and conservation in the Rocky Mountain west.



Jesús Lara Rivas '25 is studying Geochemistry at Colorado College. He was born and raised in Venezuela; moved to New Mexico, for boarding school at UWC-USA. He has played tennis for about 14 years and loves backcountry activities, particularly backpacking. Jesús' not-so-common hobby is Archery. His research interests vary from Geopolitics to Stable Isotope Geochemistry and Trace element Biogeochemistry. He intends to use his individual research opportunity in the Dark Skies Project to study the effectiveness of Wilderness Areas as conservation-designated land or Isotopic Tracers of the impact of humans in federal lands.



Liam Mullen '25 is a rising senior from Chapel Hill, North Carolina. He enjoys running, hiking, and spending time outdoors. His interest in conservation was sparked by spending time in the beautiful mountains of Colorado. He plans to major in economics and is excited to work as part of the State of the Rockies project this summer.



Nathalie San Fratello '25 is a senior from the city of Chicago. As a Design Studies major and Feminist and Gender studies minor her interests combine studying art with a social purpose, fashion, and conscious consumption. Her extracurriculars include being Fashion Club and B-Side president where she mainly organizes events for students to share their artwork. In her free time, personal passions include upcycling fabrics and materials, walking, exploring, and yoga. She is looking forward to working on the Dark Skies and Public Lands Research team, as she pursues field interviews relating to conservation in the West, sustainability, and natural textiles.