

Western Ecosystems
2022
University of Wyoming

The 2022 University of Wyoming Western Ecosystem field course was initially planned for spring 2020 but was canceled due to the outbreak of the COVID-19 pandemic. It was again canceled in spring 2021 for the same reason but finally happened in 2022. The trip was organized by Kristina Harkins (remote TA) following the 2020 blueprint by Andy Walker, Jake Marden, and Jahsh Sanchez who unfortunately graduated and couldn't join us.

Eleven students with Katie McLean (F2F TA) and Merav Ben-David (instructor) left Laramie on Friday (March 11) in the afternoon and drove to Alamosa, CO. As is common this time of year, we drove through a ground blizzard and barely made it to the CO state line before HWY 287 was closed. We spent the night at the First Methodist Church and really appreciate the generosity of Korene Fuller, and our other hosts there. Unfortunately, our planned meeting with Biologist Duane Mosher from Great Sand Dunes National Park (NP) was canceled due to our late arrival (that ground blizzard....).

Early the next morning (yes, we left before our targeted 8:00 AM departure) we drove to Great Sand Dunes NP. We hiked up the dunes and enjoyed the great weather and scenery. Ruby Jenco did a fantastic job with her presentation "Desert adaptations of small mammals". She divided us into groups and asked each to identify and provide examples for one of these adaptations. The winning group (most examples) got a treat. Of course the best part was sliding down some of the steeper slopes.



At Great Sand Dunes NP. We are UW



Ruby Jenco: "Desert adaptations of small mammals"

After a brief lunch we started driving to Alamogordo, NM and arrived at the Grace United Methodist Church where we spent the night. Thanks to Shelley Young, her family, and the congregation for hosting us (despite the on-going renovations).



Walking up the sand dunes only to slide back down.....

Again we met our departure time target and made it to White Sands NP in the early morning. The scenery was an interesting contrast to the previous day teaching us that sand dunes can take different shapes depending on how they formed. We did not see any oryx (and later learned the park is actively excluding them as invasive species), which was a disappointment! But Zach Bernhardt's talk about re-wilding North America generated an animated discussion on small bands of ancient humans chasing down mammoths across the vast plains we drove through the day before; on the likelihood of African



Zach Bernhardt: "Exotic species and re-wilding North America"

elephants to survive in current day North America; on the decimation of bison in the late 19th and early 20th centuries; on the recent return of bison to indigenous tribes; on wildlife translocations and reintroductions. Good times!



Group photo White Sands NP



Environmental art early in the morning White Sands NP

After a short visit at the visitor center we continued to Organ Mountains National Monument where we met with PhD student Scott Boyle who talked to us about his project on Mexican wolf and elk. It was an excellent talk which we really enjoyed despite discovering that we had a flat tire.

After Scott's talk we went for a hike to the Dripping Springs where Michael Pieper presented on "Mexican wolf conservation". Michael's talk added more

background on the issue of wolf management and expanded on what we learned from Scott. It was an excellent presentation. And then we had to change out the flat.....



Organ Mountains National Monument and the old dam that created the Dripping Springs



The drive to Big Bend Ranch State Park through El Paso, TX, was supposed to take about 6 hours. Our plan was to arrive in Grassy Banks Campground and setup camp by 9:00 PM. However, our attempt to fix the flat in El Paso (FAILED!) the switch to central time zone, spring forward clock change, border patrol check points, and a bit of “getting lost” meant we only got there well after midnight.



Cowpokes changing out a flat tire

Regardless, our super motivated group was up early the next morning and ready to head to Big Bend National Park! We were going to hike the Lost Mine Trail Hike but it was SOOO busy we couldn't find parking. So we continued on and hiked the Window Trail. It was well worth it! On the way back Makayla Loveland/Visin gave the presentation “Wild pig management in Texas”. After she was done, none of us wanted to meet a wild pig face-to-face (although we were still hoping to see javelinas).



Another group photo – Window Trail Big Bend NP (standing from left to right: Sophie Culver, Ashlynne Meiklejohn, Devin Gearhart, Michael Pieper, Ruby Jenco, Merav Ben-David, Zachary Bernhardt, and Darian Hale. In front: Walker Koberlein, Ema Lujan, Makayla Loveland/Visin, Kayla Wenzler, and Katie McLean.



Makayla Loveland/Visin presenting “Wild pig management in Texas”

It was getting late so we adjusted the schedule and headed back to camp via the Rio Grande, getting a glimpse of the Santa Elena Canyon along the way. It was nice to be back in camp early enough to cook dinner on open fire, have S’mores, and tell wild stories. With everyone huddled around the fire, Ashlynne Meiklejohn told us about “Border walls and wildlife conservation”, a very pertinent topic for the location and period. It was especially interesting to hear some of the human perspective of the issue and not just the wildlife angle.

That night we were introduced to a lovely neighbor: Merriam's kangaroo rat. It visited our cooking area every night and every morning to our delight. It was promptly voted as the trip mascot, although it took several more days before we found it's likeness that we could bring along.



In times of drought, the Rio Grande is really easy to cross in some places

Dinner at Grassy Banks Campground (without the grass)



The trip mascot



Because there was NO way we could give up on the hot springs, we traveled to them first thing the next morning. It was there that we learned from Ema Lujan about "Conservation of Ocelots and Jaguars in the southern US". Another great talk! We stopped at the visitor center and headed for the Big Bend Ranch State Park. At 2 PM we met with Erin O'Connell, Maya Ressler and Caitlin Camp from the Borderlands Research Institute. The three of them told us about their graduate projects at Sul Ross State University in Alpine, TX. They were very knowledgeable

and answered many of our questions. It was good to learn about wildlife management issues specific to this region.



The best (undeveloped) hot springs ever! And ah yes, we did take a lot of selfies.....

After they left we hiked The Closed Canyon Trail where we heard from Kayla Wenzler on “Freshwater turtles in the desert”, although we didn’t get to see one until a few days later. We then raced back to camp to cool off from the heat by swimming in the Rio Grande.



A group photo – Closed Canyon Trail



A freshwater turtle at the Living Desert state park

On Wednesday morning we packed up camp, said farewell to our little kangaroo rat, and headed to Guadalupe National Park. The place was packed so we skipped the visitor center and headed straight to the Smith Spring Trail. A beautiful hike that took us to a gorgeous little spring in the middle of the desert where we heard a great presentation on “Conservation of bears in the southwestern US” from Darian Hale.



A lovely spring in the desert AND a group photo

From there we headed to Carlsbad, NM. Showers at the AirBnB were what we all needed after 5 days without. A relaxing dinner was an extra bonus.

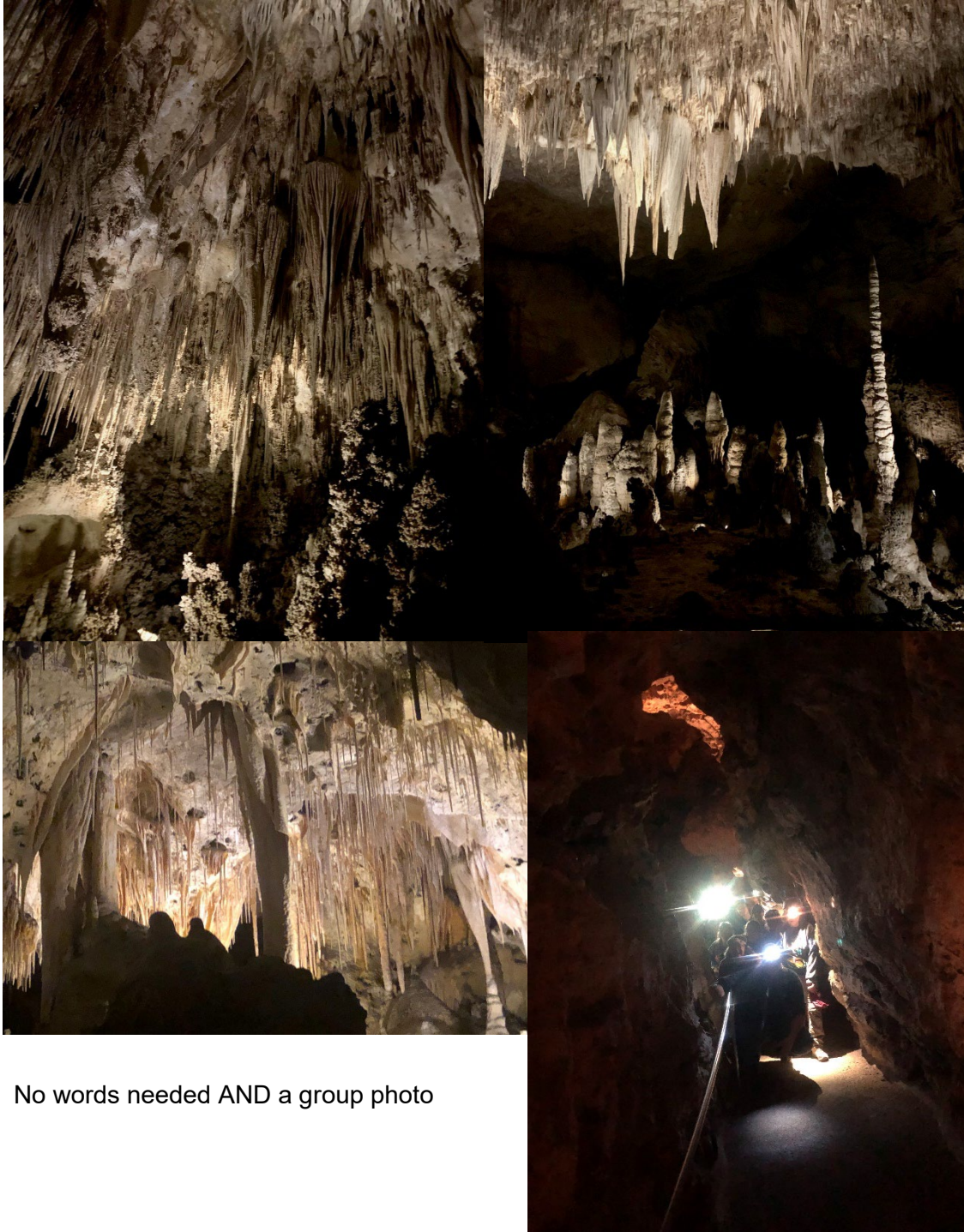
We made it to the caverns early and met with Debbie Koenigs and Morgan Bissell, two of the park rangers. They spent over an hour telling us about their present-day and previous jobs, the unique pathways they took before they found their current positions, and the daily duties they have to perform. It was great hearing from them, especially because Debbie is the Education Coordinator for the park, a type of job several students are interested in pursuing. To get a feel of what caving takes, they made us crawl through a demo tunnel.....which was fun!



Well, that was fun.....

We then headed to the caverns. Although we were too early in the season to see the bats, the place itself is inspiring, breath-taking, and educational. Not just the amazing geology but also how to manage thousands of visitors, maintain the integrity of the place, and provide a pleasant experience for everyone. Important lessons for those of us who will be charged with managing wildlife for the benefit of people.

After emerging from the caverns (we all took the elevator – except for Ashlynnne who walked back up the trail), we headed to Slaughter Canyon where Devin Gearhart delivered the last presentation of the trip “Ecology and conservation of bats in the Southwestern US”. What a finale!



No words needed AND a group photo



Heading down into the caverns with Kayla and Devin.... And Ashlynnne going down and then back up.



The day before last and we were up early and ready to go (now with a repaired tire). First stop of the day is the Living Desert State Park (where we found the freshwater turtle and the stuffed kangaroo rat). A nice opportunity to see some of the local wildlife that we never, or only briefly (javelinas and road runners), saw on the way.



Javelinas, Living Desert State Park

The drive to Clayton, NM lasted a bit longer than expected because we stopped for lunch at the Bitter Lake National Wildlife Refuge where we saw an impressive number of waterfowl species (including Buffleheads, Canvasbacks, Gadwalls, Northern Pintails, Northern Shovelers, Redheads, Ruddy ducks, Scoters, Snow Geese and more).

We spent the night at the Clayton First United Methodist Church (THANKS to Tony Baird who hosted us) and left early the next morning to check out the famous dinosaur tracks at Clayton Lake State Park and dinosaur trackways. On the way home we drove to Capulin National Monument in NM and hiked the trails around the volcano rim. Again, we got home later than planned, but what a great trip!



A volcano in the distance and a selfie at the rim

We thank ASUW, the Wyoming Chapter of the Wildlife Society, and the Department of Zoology and Physiology for providing funding for the trip.

And some student impressions and recommendations:

“The Western Ecosystems course, spring 2022 was an amazing class. This interactive learning style was needed after not traveling or interacting with my classmates for over a year due to COVID. I really enjoyed learning about the wildlife in each place we visited. I liked that there was a written plan, but we were able to change it based on our trip that day. There was a lot of driving, but it was worth the experience and the friendships.” – Makayla Loveland/Visin

“I attended the Western Ecosystem course this spring 2022 and I really enjoyed it. This course provided lots of information about the ecosystems we saw along the road trip as well as information about Wildlife jobs available throughout the country. I found this course to be one of the most valuable courses I have taken at the University because of the hands on experience it provided and the eye-opening nature of the course.” – Zachary Bernhardt

“The Western Ecosystem course over spring break 2022 was an incredible experience. Not only did I get to travel to new places and experience lots of exciting things, I also learned so many things, from desert adaptations and facts about wild boars to different opportunities available in the wildlife field. All the many presentations gave me an opportunity to learn about many different topics, and the guest presentations helped me learn even more. However, while the learning aspect of the trip was great, what really stood out to me was the many different hikes and other experiences we had, such as

swimming in the Rio Grande. Seeing so many different places and exploring them was the highlight of the trip for me. I would definitely recommend the trip to others.” – Sophia Culver

“The course and trip were good. I enjoyed seeing and experiencing many new places. It was fun to camp out again. I enjoyed meeting with various grad students in networking. There were times though that I felt we were a little rushed. I especially enjoyed Carlsbad Caverns. Overall, a very good trip and would recommend to anyone in the future.” – Michael Pieper