The Summer of 2018

For as long as I can remember, being in the outdoors has been a huge part of my life, and I truly believe that aspect has had an incredible impact on who I am today. Most of my experience in the outdoors comes from an intense hunting and fishing background. As I have gotten older and experienced many of the amazing things the great outdoors has to offer, I began to develop a mentality and passion towards protecting and conserving wildlife and their habitat. Although I have such a youthful resume in the outdoors, I have already experienced the good and the bad that comes with its beauty. It was soon after these experiences that I knew I wanted to go to school and have a career in wildlife conservation, and essentially give it my all to be a positive impact. I feel so honored and extremely grateful to have been a recipient of the James Lathrop and Wayne Capurro Memorial Internship. I would like to give a tremendous thank you to the Nevada Department of Wildlife, Nevada Bighorns Unlimited as well as the Nevada Wildlife Record Book for the amazing opportunity and to allow me to pursue the outdoors through a different scope, rather than my rifle’s. This has really been the best summer I have ever had, and I look forward to the next few summers with this internship!

I’m not going to lie, I was extremely nervous to start this internship. I knew that it would be a really great experience and something I would enjoy doing, but I was nervous jumping right into a new environment, especially because I have never had a job before. My nerves were eased right off the bat when I was told I’d be working with another Lathrop and Capurro intern throughout the summer. Working with Rhys York, a second-year intern, was so much fun. He is a great guy and has an incredible sense of humor which is nice for those long drives on Highway
50 or looking for sheep in Nevada’s blistering heat. Every first year Lathrop and Capurro intern
works in the region closest to their hometown, but they get to adventure into one of the two other
regions the following summers. For the fourth summer, the intern gets to choose where they
would like to work. Because I am from Fernley, I worked in the Western region this summer. I
worked with multiple wildlife biologists on different projects, studies, and surveys all aimed
towards improving the habitat, health, and the population of a variety of species in the Western
region.

My first week of the internship had me drenched in water in the desolate mountains just
west of Hawthorne. I was helping big game biologist, Jason Salsbury from Fallon, on a water
transport project to a few big game guzzlers; the Santa Fe Guzzler, the Gillis Paymaster Lower
Guzzler, the Snyder Guzzler, and the Gabb’s Butte Guzzler. We put a 325-gallon water tank in
the back of our work trucks and would convoy up and down the road filling the guzzler’s tanks.
We did this numerous times throughout the day. This project would not have gone smoothly
without a naval tanker that held 6,000 gallons of water that we used to refill our smaller tanks.
Being the “newbie”, my initiation was to hold the extremely pressurized water hose from the
tanker and aim it into the smaller tanks. I ended up taking my second shower of the day right
then. The benefit of that was how refreshing it was because it was so incredibly hot. At the end
of this project we transported over 27,000 gallons of water into very important water sources that
multiple species use and thrive from. After we filled these guzzlers, Jason sent us further south of
Hawthorne to recover a telemetry collar from a dead Dessert Bighorn ewe that had been killed by
a mountain lion. Finding the collar and the remains of the ewe was fascinating to me because it
showed how the cycle of life works along with how significant survival is portrayed in these
animals’ and their interaction with each other.
The following week had Rhys and I traveling into the Pine Nut mountain range just south of Carson City to assist on a black bear survey with bear biologist, Heather Reich, and wildlife biologist, Joe Bennett. The purpose of the survey was to obtain an accurate representation of the population and health of the black bears along with recovering dead telemetry collars on some bears. To conduct the survey, we were using snares that were baited with marshmallows, a raspberry scented rag, along with beaver caster to lure them in. I was lucky enough to be there when we trapped a young female black bear that weighed approximately 125lbs. This was my real first encounter with a bear and it was one of the many highlights of the summer, I could not keep a smile off my face! When we trapped a bear, we did a variety of tests that would help with results of the survey. We sedated the bear using an appropriate dosage of Telezol (depending on the size of the bear). With this young female, we used approximately 200miligrams and waited until the drug kicked in and it was safe to do the tests. First, we took the bear’s vitals to make sure it was in a healthy state under the drugs. We checked her heart beat, respiration rate, and temperature the recorded the data. For the rest of the study we took a hair sample, a blood sample from the femoral artery, along with punching two important ear tags. One ear tag was the bear’s new NDOW ID #32, and the other tag was a “Do Not Consume” tag with NDOW’s information. The last thing we did to the bear was insert a pit tag in the back of the neck. Pit tags are helpful in identifying a specific bear just in case its ear tags get ripped off and they are caught or harvested in the future. The rest of our time in the Pine Nut range was unsuccessful. The last two days of the survey we followed bear biologist, Carl Lackey, up to Hobart reservoir to assist wildlife biologist Cooper Munson and Lathrop/Capurro Intern, Sam O’Berto on their portion of the black bear project. We checked six different snares and each of them came up empty handed. Prior to our arrival, Cooper and Sam caught four different bears around the Hobart area. This
The following week, Rhys and I were able to continue working with bear biologists Heather Reich and Carl Lackey. This week was mainly focused on any human/bear related conflicts. While driving into Carson City on Monday, I got an unusual call from Heather explaining to me that she picked up a young black bear that was in pretty critical shape and that I’d need to meet her at the agricultural building in Sparks. There, we met with the veterinarian to examine the bear and to identify the state of health the bear was in. Before the examination, we had to sedate the young female using an extremely low dosage of Telezol. After a thorough examination, the vet explained that she weighed only 31lbs, had no muscle fat, and she had extremely sharp claws which indicated that she has not climbed a tree for a very long time. The ability to climb a tree for bears is crucial to their survival. Especially for young bears like this one, they need to climb trees for their protection of other, more mature bears and stronger predators. The vet also decided to take x-rays of the entire body because the initial report stated that she was limping. It turned out that her right femur was completely shattered, which explains her long claws. The vet concluded that the bear would not be able to successfully thrive, and that she was suffering an incredible amount. She ordered a euthanization. After the bear was successfully euthanized, the vet walked Rhys and I through an exploratory surgery, also known as a necropsy. The point of the necropsy was to see if there were any other underlying causes to her poor health. We took samples of the brain, the heart, liver, spleen, gallbladder, lymph nodes, lungs, and kidneys to send off to the lab for more in depth testing. Lastly, we checked the viscosity of the bear’s bone marrow. A healthy viscosity of bone marrow would be thick, much like a rubbery substance. While checking the bone marrow in her femur, it was extremely
liquified which determined poor health. As sad as it was to put down the bear, it was for her own good and the most ethical thing to do.

For the reminder of the week, we continued with human/bear conflicts. We set multiple culvert traps baited with sweets in residential areas that have had recent bear issues. Rhys and I were sent to Incline Village to check on a culvert trap and rebait it if needed. When we arrived at the trap, we noticed that the door was closed. We slowly approached the trap and to our surprise there was a huge boar. He was not as happy to see us as we were to see him! We quickly called Carl to make a game plan. He wanted us to tow the trap back into Carson where we would process and relocate him. I was personally overjoyed because I got to tow him, there are not many 18-year old’s that get to say that they towed a live bear in a trap for conservational reasons. There are also very few young adults my age who have ever got the privilege to tranquilize a bear using a dart gun, which is what I got to do to begin the processing of this bear. The process was the same as the bear snaring that I previously explained. After successful processing and tagging, we were able to relocate this bear. We picked a spot that is away from civilization where he would adapt without causing harm to humans. I finally got to witness the amazing work that the Karelian bear dogs do during a hard release. When we released the bear, we set the dogs after him while screaming and making loud noises to sort of train the bears that human interaction is not good. It was an intense adrenaline rush and it was amazing watching these dogs do what they are bread to do. Later that day, Heather got a call that there was a bear in a trap that they set near Glenbrook. She picked up the bear and we met her to process it. It turned out, after noticing an ear tag, that this is a bear that has been trapped by not only NDOW, but California fish and game. This was a female bear who had been around the block a time or two but was not the targeted bear for the trap. Heather and Carl noticed that she presented symptoms and the
behaviors bears have when they have young cubs. They were pretty certain that this female had cubs so they decided not to process her. We took her back up near Glenbrook where she was caught and did a soft release so she could relocate with her cubs. On the last day of the week, Heather sent Rhys and I around the Mt. Rose area to locate and examine two bear dens. We hiked an incredible 7.3 miles and climbed roughly 200 flights of stairs to crawl around in bear dens. We could only find one of the two targeted dens, but it was well worth the hike! We found a den in a 150ft hallowed out Jeffery Pine tree. The den was about 2 ½ ft. tall, 2 ft. wide, and 5 ½ ft. deep and the bedding contained wood chips, branches and food wrappers. We got our workout that day, but it was completely worth it because we not only got to crawl inside of a bear den, but we saw some incredibly beautiful country along the way.

The next week had us back in Fallon with Jason working on a guzzler restoration along with a natural spring protection build. The first two days were focused on the Sand Springs #22 guzzler in which a tank had collapsed due to harsh flooding. We tore out the broken tank and replaced it with two brand new tanks. We plumbed the new tanks, so they worked in accordance with the drinker, then filled them. We also fixed up the landscape and reseeded some vegetation that the flooding had ruined. After that project was completed, we worked our way north towards Dixie Valley to build a pipe-rail fence around a natural spring. The natural resource was depleting quickly due to the overuse and damaging affects of wild horses and free-range cattle. These horses and cows demolish these natural water sources and become territorial over them limiting the supply for other animals like antelope and bighorn sheep. The goal was to build an 82ft by 75ft fence to keep the horses and cows away from the headwater in order to salvage it. The spring would then flow outside of the fence to allow usage from wildlife. We fixed the
habitat and landscape around the headwater and reseeded vegetation. These two projects may have been small, but they are crucial to the survival of many different animals.

The following week we traveled to Winnemucca to help fish biologist, stream and Lahontan Cutthroat trout (LCT) specialist, Cody Byrne, on a brook trout eradication in Able Creek on the Santa Rosa mountain range. We camped out all week and had a blast! The goal of the trip was to eradicate the invasive species, the brook trout, to help protect and conserve the native species, the LCT. We used an electrode shocker that temporarily stuns the fish which allows them to float to the surface where we would be ready to net and process them. We recorded the first 25 brook trout and removed them from the system, along with every fish after that. We recorded all LCT that were caught and then processed them. The processing consisted of measuring the fish, determining the sex, recording the UTMs of the catch, and cutting a sliver off the caudal fin (tail) for identification purposes and records. The eradication was very successful, we eradicated over 300 brook trout and processed around 50 LCT. Before we returned to Reno, we had one more job to do in Falls Canyon on the other side of the Santa Rosas. For this small project, we had to transport any LCT we shocked from the lower portion of the creek to the upper portion while also conducting a stream survey along the way. This creek was unique because it was split into two parts (upper and lower) by an incredible 15-20ft waterfall. The goal of this project was to keep the invasive species, the brook trout, on the lower section of the stream and keep the LCT in the upper portion. While shocking the lower portion of the stream, we found four LCT. We processed the fish and prepared for the hike to transport the LCT. I feel like I contributed a great deal to the conservation of the LCT in this particular creek because not only did I use the electrode shocker to find the LCT, but I hauled the fish in my personal backpack up the stream. I have never carried anything in my backpack other than heavy
school books or meat from a harvested animal, so carrying four live LCT in a sack of water with an oxygenation system was definitely a special feeling. After finally reaching our destination, we successfully released the LCT into a perfect spot in the stream.

The second to last week had Rhys and I doing brood surveys in the Winnemucca area with wildlife biologist, Ed Partee. He had us survey multiple areas for the “young of the year” game birds, also known as broods. We were to locate and distinguish any brood into a class. Their class was determined depending on the size of the bird, which essentially depends on when the broods were hatched. We surveyed canyons in the Pine Forest range, the Double H’s, the Black Rocks, the Santa Rosas, and the Pueblo’s mountain ranges. That week, I explored and learned a lot of new country that I have never been to before. It was amazing to me how in less than one-hundred miles distance, the topography can change from a steep and highly vegetated mountain range, the Santa Rosas, to a dry, desolate environment on the Double H’s. We were able to classify 260 chukar, 70 quail and 10 sage grouse into their designated brood classifications. We also saw multiple antelope and mule deer and happened to run across a couple California Bighorn sheep along the way, which is always a plus.

It seemed like the last week of this amazing internship came so fast, and as upsetting as it was, that the summer was almost over. I was however, excited for what the last week had to offer. We were sent into northern Washoe county to conduct sheep surveys, brood surveys, as well as antelope counts. We had a few locations to visit throughout the week to see what we could turn up for wildlife biologist Chris Hampson. Our first location was in Hays canyon where I was able to use telemetry for the first time to locate and find the California bighorn sheep. As it was my first experience with telemetry, I was excited and wanted to be successful. Rhys and I were luckily able to locate 20 healthy sheep. Of those sheep there was a young collared ram, two
collared ewes and two ewes that had orange ear tags. In total, there were 14 ewes with 5 healthy lambs, and the young ram. The next destinations were Massacre rim, Big Point, and Coleman canyon. We were unsuccessful at Big Point but were able to locate a young collared ram on the little Sheldon National Wildlife Refuge, along with three ewes, two lambs, and three very young rams. At the Coleman canyon guzzler, we located 14 healthy sheep. Of those sheep; one yearling ram, 4 lambs, and 9 ewes. We also ran into 1 buck antelope with 6 does and 5 fawns, and then jumped 15 adult chukar. The remainder of the week was spent looking for antelope and broods. We located a total of 84 healthy antelope and of those; 37 does, 26 fawns, and 21 bucks. Lastly, we were lucky enough to find a total of 38 sage grouse. We were close enough to notice on one sage hen, some jewelry. She had two bands, one on each leg. The last week of the internship proceeded not to disappoint. I learned new country, seen some incredible animals and had a blast while doing it!

As I sit here in my dorm at the University of Nevada, Reno reminiscing about the summer, I am upset that it went by so fast. I am so grateful for the opportunities and experiences that came with it. Without the outdoors incorporated into my life, I would not know what kind of person I would be, I would feel so lost. The outdoors allows me to explore, to learn and to feed my passion. I am so incredibly thankful and honored to have been a recipient of the James Lathrop and Wayne Capurro Memorial Internship. I would like to thank the Nevada Department of Wildlife, Nevada Bighorns Unlimited, Nevada Wildlife Record Book, along with anyone involved in allowing me to gain some experience and knowledge in a career I wish to peruse in my future. This summer helped boost my drive towards protecting and conserving wildlife and their habitat. I cannot wait for next summer and the new experiences I will gain in a different region of this spectacular state of Nevada.