

# Natural Resources Department Newsletter



MARCH 2021

SUMMIT LAKE  
PAIUTE TRIBE  
NATURAL  
RESOURCES  
DEPARTMENT

PROMOTING  
CONSERVATION,  
PROTECTION  
AND  
ENHANCEMENT  
OF TRIBAL  
NATURAL  
RESOURCES

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## SUMMIT LAKE PAIUTE TRIBE

### Roads and Conditions

On January 28, the weather station at the Tribal Field Station stopped transmitting data, likely due to a power and subsequent internet outage. Prior to that time, it had recorded 0.35 inches of precipitation, and temperatures ranged from highs around 50 to lows around 0 degrees Fahrenheit throughout the winter.

The SnoTel Station located in the headwaters of Snow Creek has recorded a continuous presence of snow since November 7, with the deepest amount recorded as 36 inches. The current amount recorded is 32 inches. Until recently, the amount of snow received was ap-

Summit Lake from Soldier Meadows Road in January 2021.

Photo Credit: Dustin Hannasch



proximately on average of the past several years. Unfortunately, the lack of snow recently has made us fall below that average.

Access to the Reservation is possible from the north, but the snow that we have received has left roads leading to and within the Reservation wet and extremely muddy.

Anyone planning to travel to the Reservation is advised to use extreme caution. Bring a shovel in case of getting stuck, and extra food, water, and appropriate clothing in case you need to wait for or get help. Be sure to tell someone of your planned travel and when to expect to hear from you. Remember, there is no cell phone service at the Reservation.

### Fishing Permits Enclosed!

Your Fishing Permit for 2021 should be included with this newsletter. If it is not, please contact the Tribal Administrative Office for a replacement. Fishing Permits are issued to "adult" Tribal members over the age of 16, and should be in your possession while fishing on the Reservation. The Tribal Council set the catch limit for 2021 at 3 fish per adult member and 1 fish per minor.

## James Waddell Fish and Wildlife Biologist



Hello, my name is James Waddell and I am beginning my third year as a Fish and Wildlife Biologist with the Natural Resources Department. I have over 15 years of experience with natural resource management working on several projects ranging from grizzly bear research in Yellowstone, Denali, and Glacier National Parks to private consultation with government agencies across the country. I hold a master's degree in Natural Resource Management from Oregon State University. I am captivated by natural resource management issues with particular concerns regarding the conservation of threatened and endangered species. The continued opportunity to

**Returning Employee!**

work with both the Lahontan cutthroat trout and sage-grouse is one that I am grateful for. I am also excited to continue a project investigating bat species diversity on the Reservation this summer and I am proud to serve the Summit Lake Paiute Tribe in their efforts to conserve these species and the landscape upon which they rely.

## Dustin Hannasch Fish and Wildlife Biologist



Hello! My name is Dustin Hannasch. I feel both great honor and privilege to be one of *your* Fish and Wildlife Biologists. I am grateful for the opportunity to return to the Summit Lake Reservation for my second year. During my second year, I am committed to protecting the Summit Lake Lahontan cutthroat trout as well as the other animal species and the pristine habitat present at Summit Lake. Last year was my first introduction to this remarkable place and I humbly look forward to continue to serve you, the fish, and the land, animals, and resources within Summit Lake. I was born and raised in Littleton, Colorado but got out of that big city as soon as I could. Thus, I left for college and I graduated from a small school in a small town in the mountains of Colorado: Western State Colorado University. Since graduating in 2016 I have lived and worked with

**Returning Employee!**

plentiful fishes in Montana, Idaho, Wyoming, Utah, California, and now Nevada. I love Nevada and cherish the time that I get to spend working at Summit Lake. When I am not at work I am out fishing, hunting, hiking, backpacking, mountain biking, camping, gardening, cooking, paddleboarding, rollerblading, or longboarding.

## Rachel Redding Fish and Wildlife Biologist



Hello! My name is Rachel Redding, and I am another one of your Fish and Wildlife Biologists! I am delighted to a part of this fantastic team in the Natural Resources Department for another year! We are all very excited about this upcoming field season, and really getting to work on some of the upcoming projects we have planned. I am a Nevada Native, born and raised in the Reno/Sparks area, so home really does mean Nevada to me! I have been a wildlife nerd my whole life, so it would make sense that my career reflects my passion. I graduated from the University of Nevada, Reno with a bachelor's degree in Wildlife Ecology and Conservation. After graduation I spent two seasons with USGS on their sage-grouse project. I started as an Intern and returned the following season as a Crew Lead at a brand-new field site in North Eastern Nevada. I am fortunate enough to have field experience almost in every part of Nevada, and some in the Eastern Sierras of California. When I am not exploring the sage, you can find me on the slopes

**Returning Employee!**

snowboarding, relaxing in some natural hot springs, or snuggling with my English Mastiff.



## Lucas Lachica Natural Resource Technician



Hello, my name is Lucas Lachica and I am excited to join the Summit Lake Paiute Tribe Natural Resources Department for another field season as a Natural Resource Technician! I have fallen in love with northern Nevada this past summer and jumped at the chance to stay on through the winter going into 2021. I am originally from Richmond, Virginia where I got my degree in Environmental Studies with a double minor in Biology and Urban Studies from Virginia Commonwealth University. After graduating in 2017, I moved to Austin, Texas and joined the Texas

**Returning Employee!**

Conservation Corps and served two Americorps terms participating and leading crews in a variety of conservation projects around the state as well as disaster response missions in the south and the Caribbean. I moved to Reno with my partner in 2019 and look forward to putting my diverse experience to use assisting with the myriad of projects the Natural Resource Department has to offer.

I am incredibly grateful for the experience and the opportunity to learn about the unique resources at Summit Lake, especially in these crazy times we live in. If you run into me at the Tribal Office or the Reservation, holla @ ya boi. I love being outside and getting dirty. You can talk to me about travel, camping, backpacking, fishing, cooking, and brewing beer!

## New Construction on Wading Pool at One Mile!

In 2020, the One Mile Wading Pool received an upgrade in the form of a stone floor and steps. **As with any other Tribal facility, please seek authorization from the Tribal Chairwoman before you make the journey to the Reservation to use it**, as some coordination will be required. There are a few things to be aware of when using the wading pool:

- Due to the fragility of One Mile Spring, please do not operate the filling valve on full blast to fill the pool faster. It is possible to completely drain the spring, which will lead to permanent damage to the resource and the prevention of other Tribal members from enjoying it.
- Keep in mind that filling the wading pool takes some time. When finished, please drain the wading pool so it stays in good condition.
- *Use of the wading pool is at your own risk! There is no lifeguard and the steps have no railing. The Summit Lake Paiute Tribe is not responsible for the health and safety of the user!*



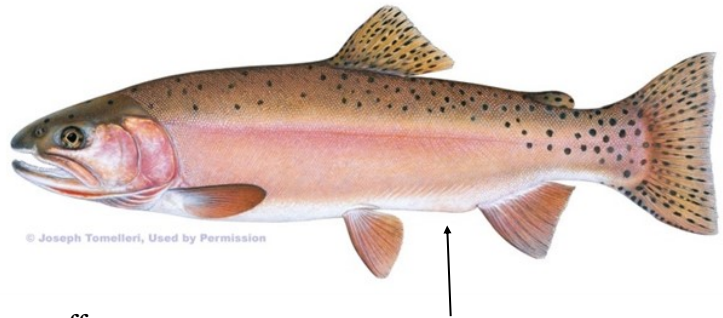
## Attention Veterans!

Please contact Housing Manager Austin New Moon so that she can get a count of our SLPT Vets! She can be reached by calling the Tribal Office at 775-827-9670 or by email at [Austin.Newmoon@summitlaketribe.org](mailto:Austin.Newmoon@summitlaketribe.org).

# Tribal Hunting and Fishing Regulations 2021

## Regulations and Limits for the 2021 Fishing Season

- Fishing limits for 2021 were established by the Tribal Council at the February 20, 2021 meeting:  
**3 fish allowed per adult Tribal member and 1 fish allowed per minor Tribal member.**
- Tribal members must be present on the Reservation to take their limit of fish.
- Except for spouses of Tribal members, fishing by non-tribal members is prohibited.
- A non-tribal member married to a Tribal member may assist their spouse in fishing or fish in place of their spouse, as long as the Tribal member is present on the Reservation. Their take in fish per year is limited to the number of fish to which the Tribal member is entitled.
- Mahogany Creek is closed to all fishing in and above the fish trap and 100 yards below the fish trap (marked by the fence crossing the stream) from March 1 to June 15.
- All of Mahogany Creek is closed to fishing from September-December 2021.**
- Tribal members may use dip nets and fishing poles to catch fish. The use of live bait, chumming, gaff hooks, spears, traps, wire fences, or other implements to take fish is prohibited.
- Remember- the fish you catch could potentially have been tagged. Please have a Tribal employee scan your catch before cleaning it. PIT (Passive Integrated Transponder) tags are small, bead-like capsules inserted just below the skin of a fish. Tribal members fishing this spring should bring their fish to the Tribal Compound to be scanned for the presence of a PIT tag so that it can be removed before eating. The diagram above shows where PIT tags are located in fish.



© Joseph Tomelleri, Used by Permission

Pelvic fin, location of PIT tag implant.

## Regulations and Limits for the 2021 Hunting Season

- Hunting within the exterior boundaries of the Reservation is permitted to Tribal members provided that hunting is conducted in a safe manner.
- A non-tribal member married to a Tribal member may assist their spouse in hunting or hunt in place of their spouse, as long as the Tribal member is present on the Reservation.
- Firearms are not to be discharged within 300 feet of buildings, land assignments, or areas known to be occupied by Tribal members or employees. Firearms are not to be discharged from motorized vehicles, or at night.
- At the February 20, 2021 meeting the Tribal Council supported the continuation of the sage-grouse hunting moratorium for 2019 in light of the ongoing sage-grouse population study. Based on preliminary data from the study, the sage grouse population is showing indications of a concerning downward trend.**

# We Need Your Help!

NRD staff respectfully asks that you bring your harvested fish to the Tribal field station, ideally before cleaning them. We have several studies going on, and allowing us to examine your catch will help us get the information we need to keep learning about the Summit Lake LCT population! We will be looking for two things:

1. **PIT tag:** PIT (Passive Integrated Transponder) tags are small, bead-like capsules inserted just below the skin of a fish. These allow us to assign a unique number to a fish, which we use to obtain valuable information about the population size and general trend. See more on Page 7!
2. **Otoliths:** If you are willing, we would like to retain the otoliths (2) from your fish. This will require you to provide or allow us to take the head of your fish. Otoliths are essentially ear bones that reside near to where the base of the head meets the spine of LCT. The ear bones have rings, much like the rings of a tree. These rings are deposited every year and therefore, NRD staff can count the rings to tell how old a fish is! Fun fact: Otoliths are tiny! They are about the size of 2 grains of rice put together.

In addition, NRD staff can provide you with a transportation permit. If you were to be stopped by law enforcement off of the Reservation, this permit provides proof your catch was legally harvested from the Reservation.



## When can we bring fish by the Tribal field station?

Please bring your fish to the Tribal field station when the gate is open during the spawning run from 07:00 am until sunset. If the gate is closed, Tribal staff are out working on another project and will generally return around midday and in the afternoon to check the fish trap. Around the field station, NRD staff can be found at the fish trap or in the building that a vehicle is parked in front of.

## What if I can't bring fish at those times?

No problem! Alternatively, bring your fish back to Reno and email Tribal Fish and Wildlife Biologist Dustin Hannasch ([dustin.hannasch@summitlaketribe.org](mailto:dustin.hannasch@summitlaketribe.org)) to arrange for a time to have your fish scanned for a PIT tag and to have the otoliths removed and/or drop off the head.

NRD staff thanks you greatly for the opportunity to examine your catch and we look forward to seeing your amazing fish coming this Spring! Happy fishing!



# Fisheries Management and Activities

Throughout 2020, the following fisheries management activities were completed:

- A fish passage barrier was installed in Mahogany Creek to prevent fish stranding
- A redd survey
- Mobile PIT tag survey
- Hydrophone installation
- Fall lake sampling

On May 4<sup>th</sup>, a fish passage barrier was constructed to prevent fish access into the wet meadow below where flow comes off from the main-stem of Mahogany Creek. This flow eventually flows into the North Fork of Mahogany Creek but the wet meadow is impassable for fish to get back into the lake from the mainstem of Mahogany Creek.



Structure to discourage fish from down-migrating into N. Fork Mahogany Creek 2020.

NRD staff conducted a “Redd Survey” on Mahogany Creek in mid-July. Redds are nesting sites where the female lays, digs, and buries eggs. Male LCT present with these females subsequently fertilize the eggs before they are buried by the female. Redd surveys are useful to visually monitor where fish are choosing to lay their eggs.

In July and August, NRD staff completed a Mobile PIT tag survey from the in-flow of Mahogany Creek to the upper watershed including Summer Camp Creek. This survey can help us to put together life histories of fish implanted with passive integrated transponder (PIT) tags. These PIT tags are also detected by the two stationary PIT tag readers stationed on Mahogany Creek.



Mainstem Mahogany Creek during Mobile PIT survey 2020.

Hydrophones are a recent addition in Summit Lake. Hydrophones are underwater devices which “listen” for fish who have had a specific acoustic tag implanted inside of them. There are now 7 hydrophones “listening” for LCT. The hydrophones will be able to inform NRD staff what habitat fish utilize within the lake at various times throughout the year.

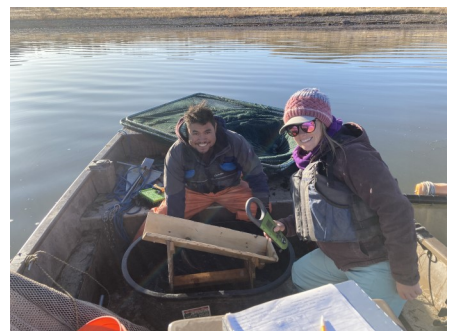
Fall lake sampling was completed by using a non-lethal net called a fyke net. A total of 336 fish were captured during this



Dustin Hannasch using the Toughpad in tough conditions 2020!

effort which lasted one month, from October to November. Fish were measured for their length and weight, implanted with a new PIT tag (if one was not already present) and released safely back into the lake.

In addition to monitoring the fish directly, NRD staff continues to track the effects of climate change on the LCT fishery. This work is accomplished using in-stream monitoring devices that continuously record stream temperature and amounts of water present at various locations on the Reservation and surrounding lands.



Lucas Lachica and Rachel Redding getting ready to process LCT 2020.

# Fisheries Management and Activities

Continued



Due to the restrictions resulting from the COVID-19 pandemic, 2020 marked the first year since 2006 that the annual spawning run was not monitored by NRD staff at the Mahogany Creek Fish Trap. Even without the spawning run numbers normally collected by hand at the fish trap, NRD staff can reasonably assume that the LCT population is still experiencing a decline in population as seen in the preceding years up to 2020 based on data collected electronically by remotely operating fish detection equipment.

One of those pieces of equipment is a PIT tag reader located in Lower Mahogany Creek. PIT tags are an acronym for Passive Integrated Transponders. The technology utilizes RFID (Radio Frequency Identification) to assign each individual

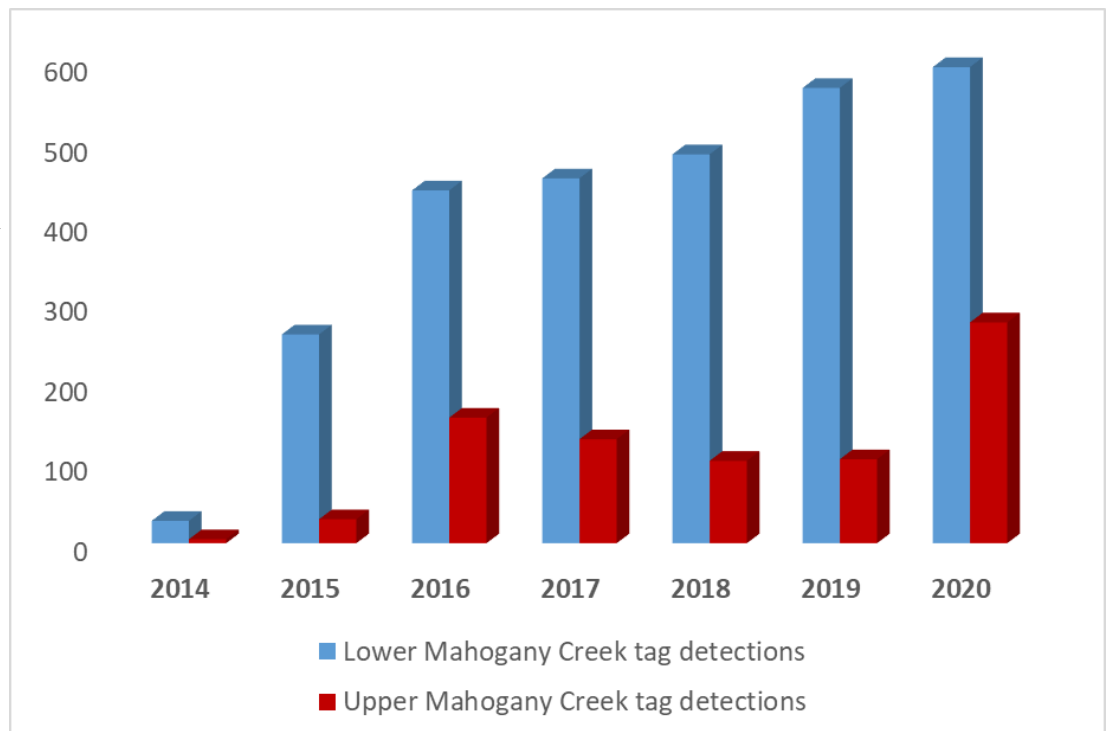
fish with a 10-digit unique identifying number. Anytime a fish with a tag passes over a PIT tag reader, this number is passively recorded by a computer and later analyzed by NRD staff.

In 2020 there was an increase of PIT tag detections at the Lower Mahogany Creek PIT tag reader. However, this was likely not due to an increase in the fish population, but rather is likely due to an increase in the number of PIT tagged fish present within the fish population. From 2014-2020, nearly

11,000 PIT tags have been implanted into fish. With the addition of more PIT tags every year, NRD staff continues to build on knowledge of seasonal movement, habitat preferences, life histories, and overall population health based largely on data collected from PIT tags.

Based on data analyses from last year it appears that the LCT population may be stabilizing as Summit Lake has been receiving more consistent moisture; possibly allowing more fish into Mahogany Creek to spawn.

Monitoring the health and the sustainability of the LCT population remains the top priority of the NRD. Continued work is planned for this upcoming summer which seeks to increase the accuracy of population estimations and quantify the habitat use of LCT.



**Above: Number of tagged fish detections at the Lower Mahogany Creek PIT tag reader.**

# ← ← ← ← ← Sage-Grouse Study ← ← ← ← ←

## **Lek Counts**

Due to restrictions caused by the COVID pandemic in 2020, three leks were visited to conduct lek counts: Tollhouse Canyon 2, Craine Creek, and Middle Spring leks. Each of these leks was only counted by employees once in early March before operations were shut down; however, we were able to obtain data on lek attendance from a flight that took video with an infrared (IR) camera that was conducted by Owyhee Air in March and April. The leks observed by the flight were Tollhouse Canyon, Tollhouse Canyon 2, Craine Creek, and Middle Spring, with several new possible



Lucas Lachica holding sage-grouse to process, 2020.

leks where birds were observed gathering and displaying lekking behavior.

## **Capture Effort**

In early spring, Summit Lake staff were sent to a comprehensive training workshop regarding USGS capture techniques in Reno, Nevada. However, the restrictions due to the 2020 pandemic limited capture

efforts to a two-week window in the fall, as no capture attempts were possible in the spring. Due to BLM restrictions, capture and collaring of sage-grouse on wilderness land was prohibited, and therefore all capture efforts were conducted on Reservation land exclusively. 2020 capture events replicated the same methodology and protocol adapted from the USGS Sage-Grouse Project as was followed in 2019. During the fall, a total of two hens were successfully captured and equipped with VHF radio collars near the northeastern shore of Summit Lake. Low capture success was likely due to the inability to trap in the surrounding area of lek sites and previously known capture locations off Reservation land.

## **Radio Telemetry Monitoring**

When Tribal pandemic restrictions were lifted, fieldwork resumed and efforts to track birds collared in 2019 began in June. Over the shortened 2020 field season, a total of nine birds were tracked mostly through ground telemetry, with additional information provided by fixed-wing airplane flights performed in January, April, May, and December. Due to limited staff and restrictions caused by the pandemic, tracking efforts were minimized, and no nest or brood locations were detected for the 2020 field season.

## **Upcoming Plans:**

Once the roads are safe enough to travel to the Reservation and field work can begin, capture efforts and lek counts will be the first priority for the sage-grouse project with a goal of capturing 25 hens to be equipped with VHF/ or GPS radio collars. Another goal is to perform



Rachel Redding listening for sage-grouse with radio telemetry, 2020.

lek counts at each lek 3- 4 times each, from mid to late March to May. This will play an important role in obtaining adequate data for population estimates.

The Natural Resources Department is also anticipating the 2021 field season with some new gear. Advancements in infrared drone technology will help gather more accurate data in lek counts and lek attendance by females. Another benefit to drone surveys is that the drone can fly high enough to avoid detection by the sage-grouse, minimizing lek disturbance and stress on the birds during this critical time.



Image of sage-grouse (bright white spots) on a lek from the IR flight by Owyhee Air.



# Bat Inventory and Monitoring Project



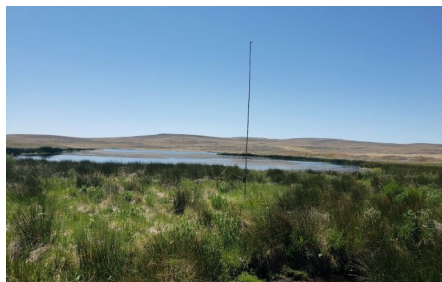
Hoary Bat - *Lasiurus cinereus*

The Nevada Natural Heritage Program (NNHP) estimates that Humboldt County supports the presence of thirteen bat species, all of which are listed as Bureau of Land Management (BLM) Sensitive Species. However, there is little to no information regarding the species composition of bat populations present on the Reservation.

Bats are a vital part of the Reservation's ecology and occupy a wide range of habitats across the state, such as wetlands, woodlands, farmland, and even urban areas. They can tell us a lot about the environment because they are top predators of insects and are sensitive to changes in land-use practices.

Bats navigate and find insect prey using echolocation. They produce sound waves at frequencies above human hearing, called ultrasound. Bats are monitored by using a bat detector that converts the ultrasonic frequencies of their calls into frequencies that humans can use, called sonograms. Each species of bat has a unique call frequency that is used to identify

different species, much like fingerprints can be used to identify individual people. It's important to note that these sound recording devices can only detect sounds at the frequencies that bats use, and not at the frequency of a human voice.



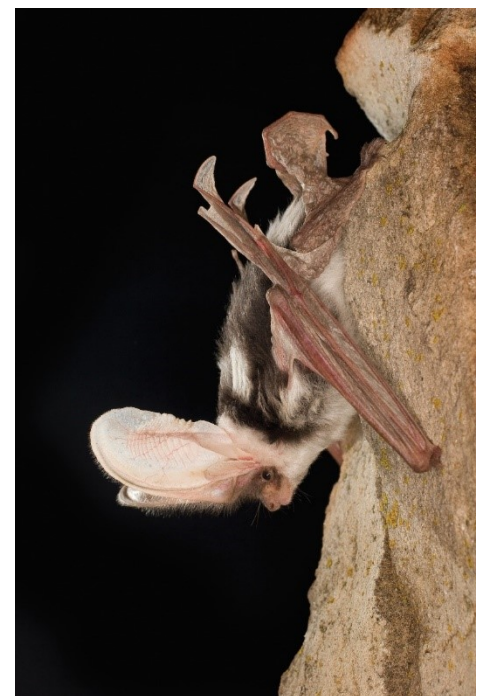
Bat detector at the Reservation.

From data collected in 2020, the Bat Inventory and Monitoring Project has provided the Tribe with important information about bats that use the Reservation. In summary:

- A total of 88,524 bat calls were recorded by the stationary and mobile bat detectors. Of those recorded calls, 71,347 were of high enough quality to use for analysis.
- Of the 71,347 calls analyzed, 54,168 were able to be identified as individual species.
- The Pallid Bat, Western Red Bat, and Canyon Bat are not known to occur in Humboldt County, but our recordings provided evidence that they do occur on the Reservation. This is very exciting!

In addition, the first year of this project taught us that the Reservation is home to 16 species of bats:

- Big brown bat
- Brazilian free-tailed bat
- California myotis
- Canyon bat
- Fringed myotis
- Hoary bat
- Little brown bat
- Long-legged myotis
- Pallid bat
- Silver-haired bat
- Spotted bat
- Townsend's big-eared bat
- Western long-eared myotis
- Western red bat
- Western small-footed myotis
- Yuma myotis



Spotted Bat - *Euderma maculatum*

# Fences, Weeds & Seeds!

## Assessing and Protecting Land – Fence line maintenance and installation.

It has been a productive summer for the Summit Lake Reservation boundary fence! After acquiring two sections of land in 2016 along the western boundary, funding was secured to install additional barbed wire fence along the new boundary. In September, contractors successfully placed approximately 3 miles of fencing around the newly acquired land and joined it with the existing fence line. Additionally, NRD staff completed several miles of fence line maintenance and improvement. The fence along the Southern border was in a sorry state and after a thorough patrol, downed fence was replaced and tightened long the southern portion of the Reservation boundary. It is the NRD's hope that these fences will serve to protect important Tribal resources. In cooperation with BLM, wild horses that have been impacting sensitive habitat were driven out of the Reservation. This action, along with the new fencing, will aid in the mitigation of impact and recovery of vulnerable resources.



## Invasive Weed Management



The Natural Resources Department is committed to conserving Reservation lands and resources. As part of that, staff continue to manage for a variety of invasive weeds utilizing different techniques and methods. Mechanical removal, and when appropriate, chemical treatment have been the main tools in the NRD's approach to weed management on the Reservation.

Weeds currently being managed include Bull, Canada, and scotch thistles as well as tamarisk. During 2020, Tribal staff revisited previous treatment areas to monitor progress and efficacy of management practices on the Reservation. Thistles continue to persist on the Reservation and to assist in implementing effective management strategies, during the summer of 2020 NRD staff began a mapping project of affected areas. Furthermore, a survey was conducted in June 2020 of tamarisk treatments implemented in Spring 2019 using the "cut and paint" method of herbicide application. This effort appears to have been effective as regrowth of these plants was not apparent or is limited, and while several more plants were discovered, they were treated and will be monitored.



(Continued)

# Fences, Weeds & Seeds!

## Fire Break and Seeding Project



Victoria working on seeding project on One Mile Road, 2020.

An additional project implemented during the 2020 field season despite challenges arising from COVID-19 restrictions was a fire break and seeding project.

During November, existing mowed fire breaks along Summit Lake Road and the road to One Mile were maintained by mowing them with the boom mower on the Tribe's tractor.

The following week, these areas were seeded, in addition to several stretches of decommissioned road and two test plots in the weedy open areas on the way to the boat dock.

The seed was spread with a seeding implement that was pulled behind an ATV, and a second ATV followed along behind the first dragging a harrow that gently spread dirt over the seed.

The goal for this seeding was to encourage colonization of native plants known to be positively associated with greater sage-grouse in areas that had been disturbed. Fire breaks are a necessary part of providing safety for Tribal resources, but they do introduce disturbance into the system. These disturbed areas are often first colonized by invasive weeds, who can take hold faster and out compete native seeds. However, these invasive species do not provide the same or in some cases any nutritional value to wildlife such as greater sage grouse.

The seed mix utilized contained Sandberg's bluegrass (*Poa secunda*), squirreltail (*Elymus elymoides*), and sulfur-flower buckwheat (*Eriogonum umbellatum*), all native species with high nutritional value to greater sage grouse. The seed for this project had been purchased in the fall of 2019 and subsequently stored over winter and summer in a building at the Reservation field station. Given that these storage conditions could likely lead to decreased seed viability, another goal for this project was to put the seed to as much good use as possible. Therefore, the test plots near the lake were tested for effectiveness, as that frequently disturbed area has been colonized by undesirable and invasive cheat grass.



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## A Note from the Director

What a year! Living and working in the midst of a global pandemic was definitely not what I had in mind for 2020 when I wrote to you in last year's newsletter— and I sincerely hope all of you have been able to remain safe and healthy during this challenging time. We aren't out of the woods yet, but there is beginning to be light at the end of the tunnel... and 2021 should be a better year!

The Natural Resources Department did what we could last year as far as caring for the resources and maintaining ongoing projects while still remaining safe. The pandemic began just as we were starting up field operations for the year, but because of stay-at-home orders, continually learning new information, supply shortages, and other challenges, it was June before we worked out how to safely operate at the Reservation. This meant that the activities we were able to complete were mainly ones that we could do safely with a small group of people. In short, the activities that were maintained were already ongoing projects and operations.

However, all that is behind us now! As with many other places, there will be fewer employees at a time at the Reservation for a while but all of us within the Natural Resources Department are dedicated to try to catch up this year and are looking forward to doing so. I am honored to continue serving the Tribe as the Natural Resources Department Director, and I hope to see you sometime!

~Rachael Youmans



## Activities Planned for 2021

Some of the exciting activities the Natural Resources Department has planned for 2021:

- Activities surrounding LCT management: managing the spawn run at the Mahogany Creek Fish Trap, capture of fish from the lake and stream for PIT tagging, water quality and meteorological monitoring, and hydroacoustic surveys of the lake.
- Tribal employees will continue to study sage grouse throughout 2021 by completing lek counts, collaring birds, tracking collared birds, and collecting fecal samples. If you find a dead sage grouse or collar, please report it to the Natural Resources Department so that we can add that information to our data.
- Vegetation management will continue in 2021 in an effort to preserve the Reservation's native plant community and landscape.
- In 2021 the bat monitoring project will continue, and expand to also monitor, through sound, migratory birds and amphibians. This is a very exciting new project!