

SUMMIT LAKE PAIUTE TRIBE NATURAL RESOURCES DEPARTMENT NEWSLETTER



APRIL 2023



Photo Credit: Audrey Dufresne

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On March 20, 2023 the SnoTel weather station on Summit Lake Mountain recorded 48 inches of snow, and temperatures ranged from highs around 32.4 to lows around 17.2 degrees Fahrenheit. The SnoTel Station has recorded continuous presence of snow since November 2nd, with the deepest amount recorded as 50 inches on March 15th. With the heavy snow that we've gotten this year, roads are snowy and



in some cases impassable. Expect lots of mud and difficult travel conditions in the upcoming weeks as the snow begins to melt.



Travelers are 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.



NRD STAFF



JAMES WADDELL FISH & WILDLIFE BIOLOGIST

Hello, my name is James Waddell, and I am beginning my fifth year as a Fish and Wildlife Biologist with the Natural Resources Department. I have a master's degree in Natural Resource Management from Oregon State University, and I have decades of field experience working on several diverse projects ranging from bear and wolf research to private consultation with government agencies. I am captivated by natural resource management issues with particular concern regarding the conservation of threatened and endangered species. I am excited to continue projects investigating bat and bird 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.



AUDREY DUFRESNE FISH & WILDLIFE BIOLOGIST

Hello! My name is Audrey Dufresne and I'm excited to be returning this year as one of your Fish and Wildlife Biologists! After assisting on the Sage-Grouse project last year, I fell in love with Summit Lake and the wildlife I had the privilege of working with. I am thrilled at the opportunity to step into more of a leadership role this year by helping manage your Lahontan Cutthroat Trout. I am also excited to continue assisting Becca Carniello with the ongoing sage grouse project, as well as assisting Madison Hutchinson with the Mahogany Creek restoration project. In 2021, I graduated from the University of Nevada, Reno with a degree in Environmental Science emphasizing in restoration and conservation and a minor in Spanish. Through my studies and experiences working on campus at the Aquatic Ecosystems Analysis Lab, and an internship with the Tahoe Environmental Research Center, I have found a deeper desire to restore and maintain our natural ecosystems. In my free time I enjoy playing rugby, exploring new places, painting, and spending time with family and friends.



NRD STAFF



MADISON HUTCHINSON ENVIRONMENTAL SPECIALIST



Hello everyone. I am excited to continue working with the Summit Lake Paiute Tribe and to have another exciting field season! I joined the natural resource division last spring and will have worked with SLPT for a year now. My responsibilities on the Reservation include water sampling, invasive species management, and helping with LCT sampling. I am a Reno local but have done other work in Wyoming and Hawaii. I graduated last spring from UNR with a bachelor's degree in Environmental Science and a focus on ecology and sustainability. When I am not working, I like spending time sightseeing, playing with my dog Bluey, and relaxing with a good tv show/movie. I look forward to learning more about our great Nevada environment!

MEGHAN MUNN PROGRAM COORDINATOR/BIOLOGIST



Hello! My name is Meghan Munn, and I started working for the Tribe in October 2022 as the new Natural Resources Program Coordinator/Biologist. I grew up in Auburn, California and received my Bachelor of Science in Wildlife and Conservation Biology from UC Davis. Previously, I worked with the USGS in the California Central Valley on the monitoring project for the threatened giant garter snake, I have also worked at UC Davis in a teaching biology lab, and at UNR as a Laboratory Animal Technician. I am passionate about conservation, and I am excited to assist with the implementation of the numerous natural resource and environmental programs of the Tribe. Please feel free to email me at meghan.munn@summitlaketribe.org if you have any questions or concerns.

NRD STAFF



MARY-CLARE DEBORD NATURAL RESOURCES TECHNICIAN



I am a new employee with the Summit Lake Paiute Tribe, and I am excited to start the field season. I moved here to Reno, Nevada as a baby and I have called this city my home for many years. I will be graduating this summer with my bachelors in Forensic Psychology. When I am not working I am catching up on TV shows, friends, and family. I look forward to starting a new chapter here at the Summit Lake Paiute Tribe.

RACHEL HARTMAN NATURAL RESOURCES TECHNICIAN



Hi! My name is Rachel Hartman, and I'm so excited to be joining the Natural Resources Department team as one of your natural resource technicians this year! I just graduated from UNR this past December with a bachelor's degree in wildlife ecology and conservation, and am looking forward to applying my knowledge and expanding my experience while helping mainly with the Sage-Grouse and Lahontan cutthroat trout projects. My main interest lies in conservation, so I am particularly excited to be able to help preserve such unique and culturally significant species. Some of my other interests include hiking, backpacking, crocheting, and playing the piano.



HUNTING & FISHING REGULATIONS

Fishing limits for 2023 were established by the Tribal Council at the March 18, 2023 meeting:

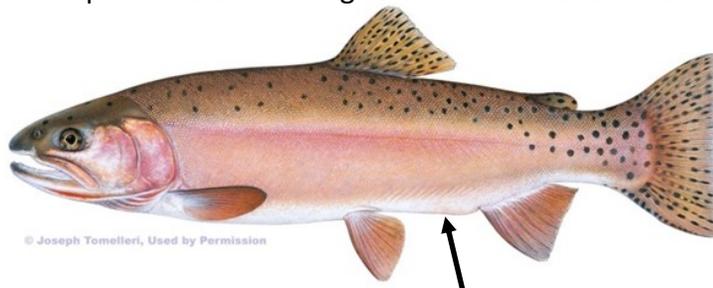
3 fish allowed per adult Tribal member and 1 fish allowed per minor Tribal member per year.

- ◆ 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 2023.**
- ◆ 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.



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Pelvic fin, location of PIT tag implant



HUNTING & FISHING REGULATIONS CON.

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 March 18, 2023 meeting the Tribal Council supported the continuation of the sage-grouse hunting moratorium for 2023 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.





NRD staff with UNR Jr. Princess



Staff playing pin the tail on the sage grouse

NATIVE AMERICAN DAY

Last September we held a community outreach event to celebrate Tribal members and display the primary projects of the Department. With the help of other SLPT staff, the Council, and you all, it turned out to be a huge success! Activities (for all ages) included planting native wildflowers, painting Lahontan Cutthroat Trout cut-outs, and pinning tail feathers on the Sage Grouse. Additionally, Tribal art and beading were on display to celebrate the Tribe's beautiful artists. We loved meeting you all and answering any questions or concerns you may have had for us.

*A special thanks to Mountain Mikes Pizza for donating food to the event!

Tribal members and Council get together to take a picture.



NRD information booth



FISHERIES MANAGEMENT AND ACTIVITIES

The following main fisheries management activities were completed in 2022:

- LCT spawners counted at the Mahogany Creek fish trap
- Mark-recapture of LCT in the lake and creeks
- Counted the juvenile LCT migrating to the lake
- Past and future climate research
- Climate and streamflow monitoring
- Hydrophone data download

The fish trap was in operation from April 9 until June 15, 2022. During that time 695 Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*, LCT) spawners were captured moving upstream. The average number of fish captured at the fish trap since 1978 is 1,147. Although the 2022 count was below average, we are not seeing a decline like that seen from 2012 to 2015. The spawning population appears to remain stable despite recent drought conditions.



The water loss is a concern, but it may be something that has happened at Summit Lake in the distant past, possibly multiple times! To find out, the NRD in conjunction with the University of Nevada (Reno) initiated a paleoclimate study that will be ongoing for 2 more years. A paleoclimate study means that we will take a look into the past to see what Summit Lake and the surrounding area was like thousands of years ago. The main goal is to find out how Summit Lake, its tributaries (Mahogany Creek and Snow Creek), plants, and therefore the LCT responded to wet and dry periods of the past. Knowing how the ecosystem responded to wet and dry times of the past will help us to understand how LCT can survive dry periods into the future. The future can be modelled with computer programs in order to understand the way that the Summit Lake ecosystem is trending and how the population might be affected.





FISHERIES MANAGEMENT AND ACTIVITIES

Not all LCT that spawn on Mahogany Creek are captured at the fish trap because some fish spawn downstream from the fish trap. It is important that the NRD understands how many fish spawn each year. Thus, an estimation of the total spawning run is calculated from passive integrated transponder tags (PIT tags). PIT tags are tiny tags that have a unique number associated with it that can be read by our special PIT tag readers. They are the same type of tags that are in your micro-chipped dogs and cats! On top of being a valuable tool for estimation of spawning fish every year, they also allow the NRD to track fish movement throughout the fishes' lives. Additionally, PIT tags are used to estimate the population of LCT in the both the lake and the stream. The entire spawning population in 2022 was estimated to be 983 fish, which is close to the average number of spawning LCT in the last 6 years.

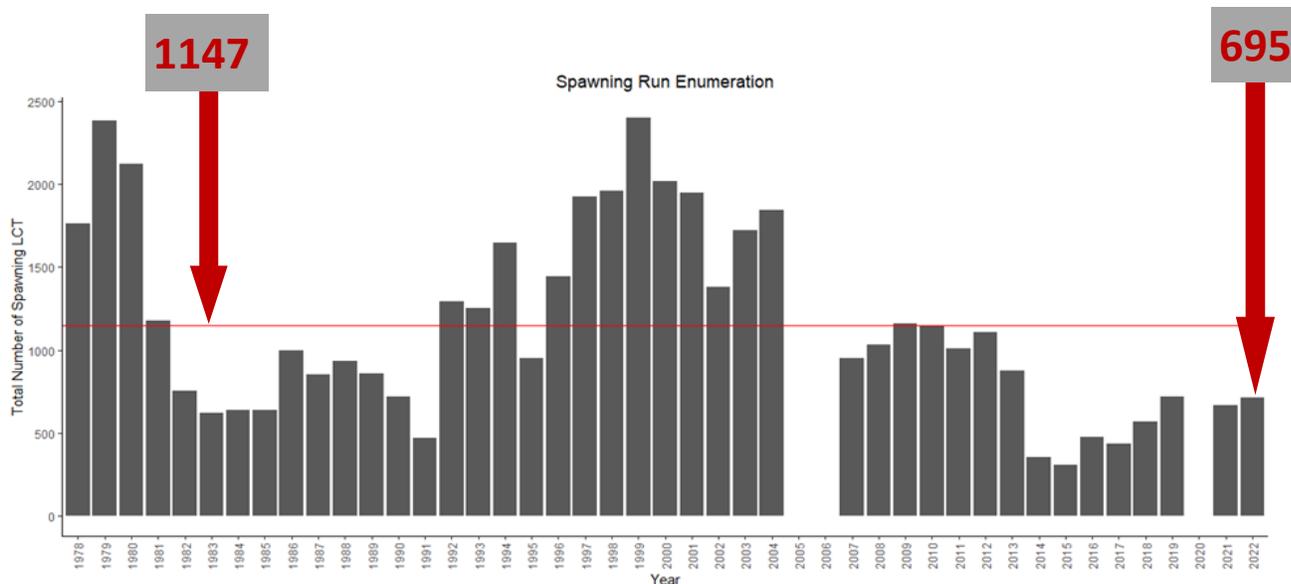
Using nets called fyke nets that are placed into the lake from boats, LCT are captured out of the lake. 'Lake sampling', as this survey is known to NRD staff, has been done annually since 2015. These surveys are completed in order to estimate the total number of adult LCT that live in the lake. Fish are captured, measured, weighed and checked for a PIT tag. If they do not have a PIT tag already, one is implanted by staff. Fish are then released unharmed back into the lake. The NRD does this every spring (before the spawn begins), summer, and fall. In 2022, 646 LCT were captured and released.

In order to better understand the stream population of LCT, non-lethal electrofishing surveys were conducted in Mahogany Creek. Electricity is delivered into the water from what is called a backpack electrofishing unit. The electricity stuns a fish asleep long enough for NRD staff to capture it. They typically recover quickly. Once captured, length and weight are measured and PIT tags are checked for and implanted when necessary. The fish are then returned to the creek unharmed.

Small nets called "miniature fyke nets" were placed into Mahogany Creek from April 8 until October 27, 2022. These nets were located near the mouth of Mahogany Creek and set up in a way that they exclusively captured small LCT, not adults. Fish captured had their length measured and were checked for PIT tags. They were then released unharmed.

Hydrophones are a recent addition in Summit Lake. Hydrophones are underwater devices which "listen" for fish who have had a tag implanted that these devices can hear. There are now 7 hydrophones "listening" for LCT and 17 fish with tags that can be heard by the hydrophones. The data will be used to inform NRD staff on what habitat fish utilize within the lake at various times throughout the year. The project will end in 2023.

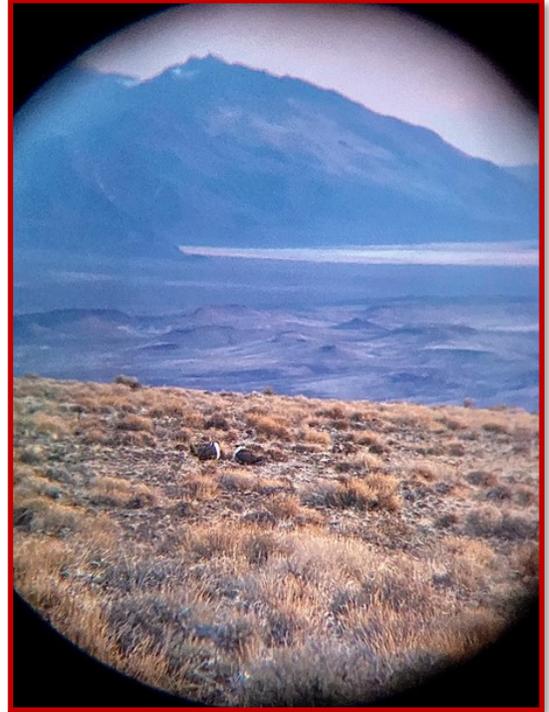
In addition to monitoring the fish directly, staff continues to track the effects of climate change on the LCT fishery. This work is accomplished using in-stream monitoring devices that continuously record stream temperature and amounts of water present at various locations on the Reservation and surrounding lands. We also use a weather station on Mahogany Creek and up the Snow Creek drainage to monitor climate variables.





SAGE-GROUSE STUDY

Greater Sage-grouse (*Centrocercus urophasianus*) are the largest of seven grouse species in North America and occupy sagebrush-steppe ecosystems, which dominate the western portion of the continent. Sage-grouse were historically found throughout sagebrush communities in 16 states and along the southern border of three western Canadian provinces. The remaining core sage-grouse populations are located in areas of Colorado, Idaho, Montana, Nevada, Oregon, and Wyoming, with remnant populations in other states. Over the last 30 years, sage-grouse populations have declined dramatically and currently occupy less than 50% of their historic range. Habitat loss, degradation, and fragmentation have reduced the quantity and quality of sagebrush-steppe habitat leading to widespread population declines. Wildfire, invasion of nonnative flora and fauna, grazing pressures, energy development and mining, agriculture and rural/ suburban development, disease, and climate change are all factors impacting sagebrush-steppe habitats. Because of these sources of habitat degradation and their contribution to sage-grouse population declines, sage-grouse have been petitioned multiple times for listing under the Endangered Species Act. To date, they have yet to be listed, largely in part due to state and federally enacted conservation efforts and monitoring programs throughout the West.



Tribal members have observed a sharp decline in sage-grouse populations on the Reservation over the past few decades. In the past, sage-grouse were commonly seen in groups of 30-40, but are now rarely seen, and usually in smaller groups of three to five birds. In response, the Summit Lake Paiute Tribe Natural Resources Department (NRD) began a sage-grouse study in 2014 to assess population trends over time and determine factors impacting the local sage-grouse population. In this study, birds are captured, outfitted with VHF (Very High Frequency)/GPS (Global Positioning System) collars, and morphometric measurements are recorded in the interest of monitoring seasonal movements, nest success, and habitat use. The goal is to regularly monitor lek attendance, seasonal movements, nest success, brood success, and mortality events. These data will help inform the Tribe on what habitat types on or near the Reservation are critical for sage-grouse, as well as where mitigation efforts should be implemented. Additionally, these data will help the Tribe to understand the population status of the local sage-grouse that may inhabit the Reservation.

Lek Counts

To observe peak lek attendance in the spring of 2022, ground surveys were conducted multiple times at each lek throughout the lekking season. Ground surveys took place from March 26 through May 13 at five leks surrounding the Reservation: McCully, Tollhouse Canyon 2, Bitterroot, Craine Creek 2, and Bear Buttes. Of those five leks, the highest male counts occurred at Bear Buttes, with 16 males counted, followed by Tollhouse Canyon, with 12 males counted. McCully and Craine Creek 2 were both visited three times throughout the lekking season, with male high counts only reaching 4 and 3 respectively. Bitterroot was visited five times throughout the lekking season, but only signs of grouse use were observed in the area, and due to low visibility and inclement weather, no real count was ever made. This year, the NRD wanted to test using a drone with infrared sensing technology to see if it could assist in obtaining more accurate lek counts with less disturbance to the lek. The drone was tested once at Bear Buttes but was not successful. Even at a far distance, the grouse seemed to be disturbed by the sound of the drone and would hunker





down and stop lekking when it was turned on. Testing immediately ceased upon realizing the grouse were disturbed and the drone was not attempted again this season.

Capture Effort

In the spring of 2022, staff successfully captured three hens and outfitted them with either a VHF collar or a combination VHF/GPS collar and uniquely identifying leg band. The NRD plans to continue using these combination GPS/VHF collars because the data collected can provide us with more accurate estimates of habitats used by sage-grouse throughout the seasons in comparison to the VHF collars alone. Although the VHF collars do not record data automatically like the GPS/VHF collars, they are still incredibly useful in assisting us with gathering sage-grouse survival data. Fall Capture efforts were also successful with 15 sage-grouse captured (12 female, 3 male). The hens were outfitted with a VHF collar or a combination GPS/VHF collar and a uniquely identifying leg band, while the males were only outfitted with a leg band. Total capture efforts for the year produced 18 new birds on record. Fifteen of the newly captured sage-grouse were captured on the Reservation and the remaining 3 were captured at leks within 10 miles of the Reservation.

Radio Telemetry Monitoring

Using radio telemetry, sage-grouse were regularly monitored on ground and through contracted air surveys to analyze movement, reproduction, and survival. In the springtime, ground tracking was conducted to monitor two hens that were found on a nest. After conducting nest checks every three days, one nest was found predated on and the other nest appeared to be successful. Continued tracking of the bird with a successful nest occurred but a brood was never observed. Collared grouse were continually tracked, and locations were recovered through GPS collar downloads and via triangulation/biangulation through the program "Location of a Signal" by Ecostats. To obtain more locations, the NRD contracted Owyhee Air Research Inc. for telemetry flights in June, September, and December. To download GPS data, the base station was also sent to Owyhee Air for the December flight to retrieve GPS data of the newly GPS collared fall captures. On that flight, the base station was able to download all GPS collar data besides one bird that was fitted with a GPS collar in the Spring. Obtaining location data is essential in studying the population dynamics of sage-grouse in and around the Reservation and is very important for this project.



Mortalities

Over the 2022 field season seven sage-grouse mortalities occurred. One may have been a slipped collar and one was unable to be retrieved due to limited staffing at the time the mortality occurred. Four were due to suspected avian or carnivore predation, one was due to a fence strike, and the final mortality was due to Highly Pathogenic Avian Influenza.

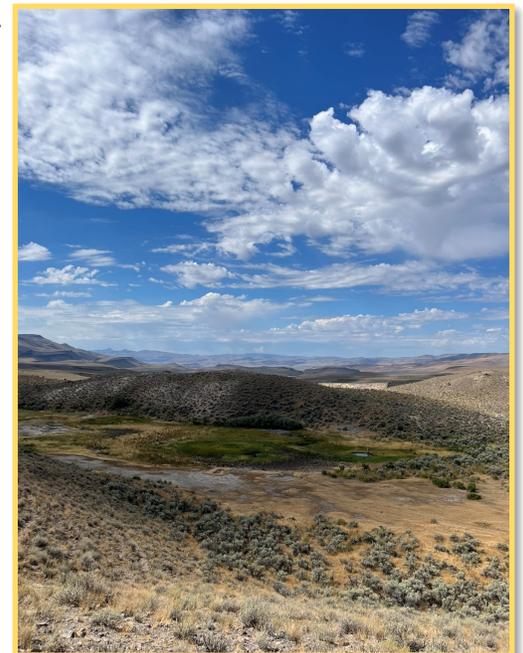
Upcoming Plans:

When the roads are safe enough to travel to the Reservation, lek counts are the main objective of the sage-grouse project. We aim to count our leks 3- 4 times each, from mid-March to mid-May. Once lek counts are wrapped up, the next step is to continuously monitor the collared hens throughout the rest of the season to find nest and brood locations, determine chick survival, and assess habitat features important to sage-grouse during the nesting and brood rearing seasons. These objectives will play an important role in obtaining adequate data for population estimates.



NOXIOUS WEED PROJECT

SLPT worked with Great Basin Institute (GBI) to treat noxious weeds along Mahogany Creek and around Summit Lake. Invasive species are critical problems to address because of their ability to out-compete natural species. Since invasive species typically have limited natural competitors and predators, they tend to take away key resources shared with native plant species. This causes the number of native species to decline and the number of weeds to grow. In order to combat this problem, GBI worked at the Reservation for eight straight days, implementing mechanical and chemical treatments. The weeds targeted by the crews included Bull Thistle, Scotch Thistle, and Tamarisk. In total, 13.6 acres of thistle were removed, and 47 tamarisks treated. Noxious weed treatments are planned to continue this upcoming field season.





BAT INVENTORY AND MONITORING PROJECT

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 we use to identify different species, much like fingerprints can be used to identify individual people. The Summit Lake Paiute Tribe Bat Inventory and Monitoring Project has provided the Tribe with important information about the 15 species of bats that use the Reservation:

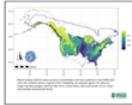
Common Name	Scientific Name	Number of Calls Detected in 2020	Number of Calls Detected in 2021	Number of Calls Detected in 2022	2020-2022 Total Calls Detected
Pallid bat	<i>Antrozous pallidus</i>	194	156	160	510
Townsend’s big-eared bat	<i>Corynorhinus townsendii</i>	221	247	165	633
Big brown bat	<i>Eptesicus fuscus</i>	433	241	488	1,162
Spotted bat	<i>Euderma maculatum</i>	147	144	228	519
Silver-haired bat	<i>Lasionycteris noctivagans</i>	952	1,723	4,135	6,810
Hoary bat	<i>Lasiurus cinereus</i>	193	171	269	633
California myotis	<i>Myotis californicus</i>	51	73	159	283
Western small-footed myotis	<i>Myotis ciliolabrum</i>	603	735	1,178	2,516
Western long-eared myotis	<i>Myotis evotis</i>	3,707	2,923	5,995	12,625
Little brown bat	<i>Myotis lucifugus</i>	4,476	1,794	3,266	9,536
Fringed myotis	<i>Myotis thysanodes</i>	120	69	201	390
Long-legged myotis	<i>Myotis volans</i>	59	54	109	222
Yuma myotis	<i>Myotis yumanensis</i>	13	11	19	43
Canyon bat	<i>Parastrellus hesperus</i>	2,075	1,793	1,530	5,398
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	239	614	2,035	2,888

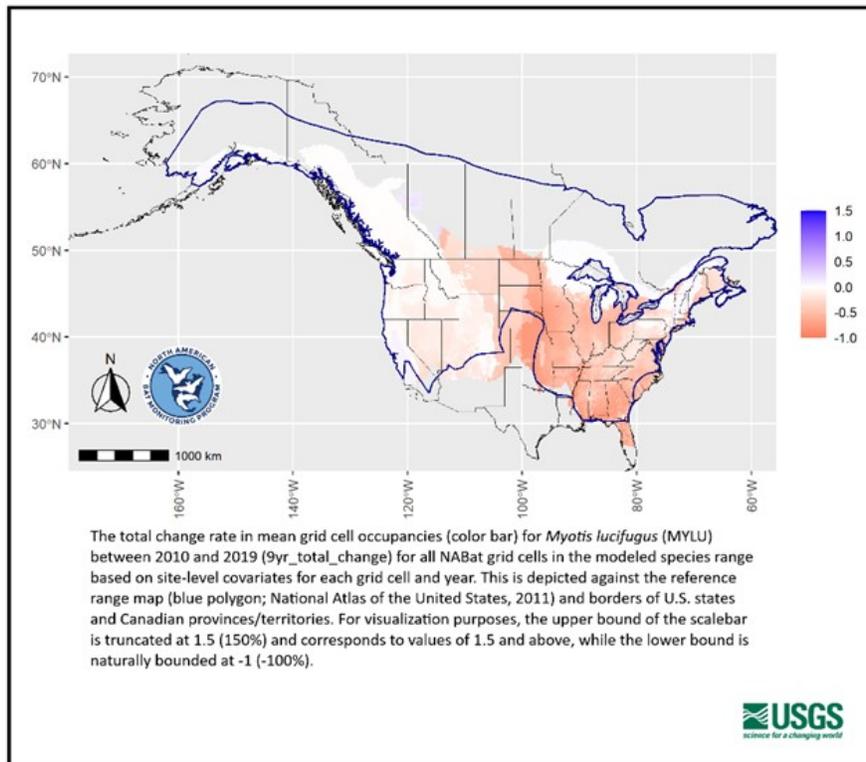


BAT INVENTORY AND MONITORING PROJECT

The information collected by Tribal biologists is beginning to show bat population trends on the Reservation. The last three years of research has provided the Tribe with a list of species that live at the Reservation as well as a broad idea about how the population of each species changes with time. The Natural Resources Department also contributes this information to The North American Bat Monitoring Program (NABat), which is made up of a large community of partners across the continent working together to better understand bat population status and trends in the U.S., Canada, and Mexico.

For example, the NABat community has collected information about the Little Brown Bat over the last twenty years, which shows that their population is in decline. Little Brown Bats are threatened by White-nose Syndrome (WNS), a fatal fungal disease, caused by the fungus *Pseudogymnoascus destructans*. The disease causes bats to use more energy and become dehydrated during hibernation, which leads to starvation and eventually death. However, the Little Brown Bat population on the Reservation appears to be stable, which is a good indication that the ecology of Summit Lake continues to thrive. Over the 2023 field season staff will continue to monitor bat populations on the Reservation, including working with scientists from the University of Nevada Reno to test bats for WNS.

Species	Status Variable	Latest Map	Total Change (2016-19)	Total Change (2012-19)	Total Change (2010-19)	Change Map
Little Brown Bat  <i>Myotis Lucifugus</i> State/Provincial Results	Summer Occupancy		-11.5% (CRI = -18.0% to -4.3%)	-19.8% (CRI = -27.2% to -11.7%)	-21.0% (CRI = -29.7% to -11.6%)	
	Summer Abundance	In Development	In Development	In Development	In Development	In Development
	Winter Abundance	In Development	In Development	In Development	In Development	In Development

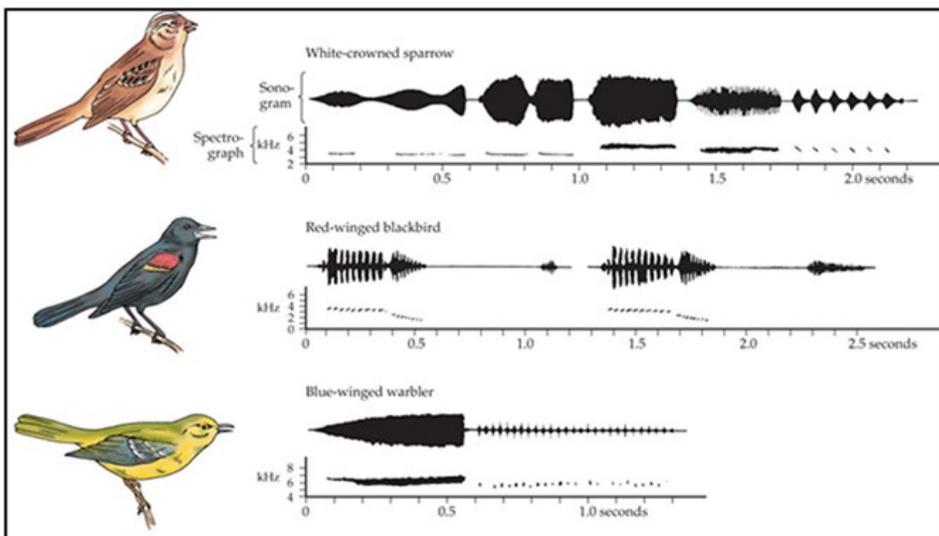


These images from NABat show the decline of the Little Brown Bat in North America.

SOUNDSCAPE ECOLOGY PROJECT



The study of soundscape ecology provides scientists with unique insight into species diversity and habitat conditions. Many animals produce unique vocalizations which can be used to detect their presence on the Reservation, even when they can't be seen. Birds, frogs, and insects are monitored by using a special audio recorder that records sound at specific times of day and night. Audio recorders are often better than cameras because they can record species over larger areas and over longer time frames. Audio recordings are analyzed by computer algorithms to identify specific species' calls, as each species has a unique frequency pattern that can be measured similar to fingerprints between people. Over time, we can learn which species and how many species are present in different habitats which allows us to map biodiversity across the Reservation. Understanding biodiversity over space and through time can help inform us about how to best maintain or restore habitats for future generations. If you are interested in giving bird sound identification a try for yourself, the Cornell Lab of Ornithology offers a free and easy to use cell phone app called Merlin.



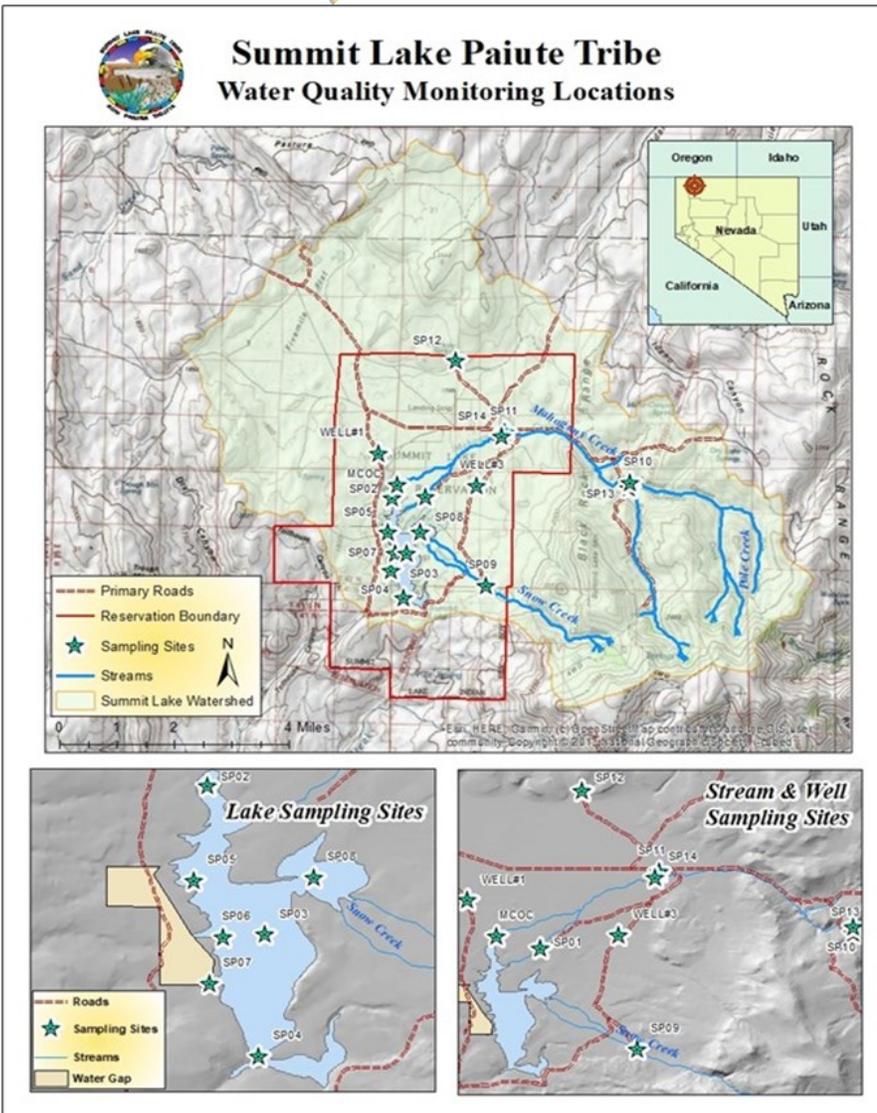
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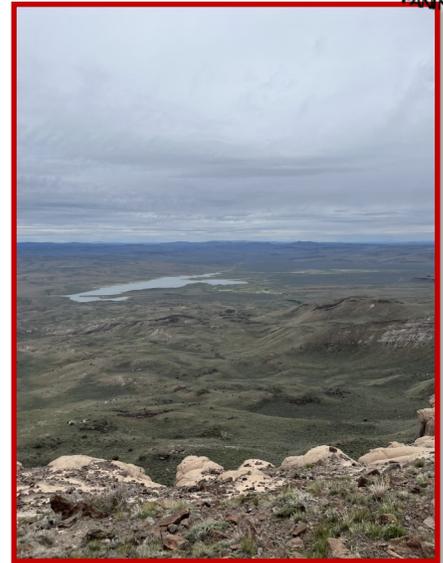
This image shows an example of how wildlife recordings are analyzed to identify specific species



WATER QUALITY & GAME CAMERAS



This image shows the Summit Lake Watershed and Water Quality sampling locations



Water Quality Monitoring Project

The Summit Lake watershed requires the protection of water quality to guard human and environmental health. To address potential pollution issues, the Tribe developed a Quality Assurance Project Plan that specifies procedures and protocols for a water quality monitoring program. Each spring, summer, and fall staff collect water samples from Summit Lake, Mahogany Creek, Snow Creek, water wells, and natural springs. The samples are analyzed in a laboratory for several different water quality parameters such as pH, inorganic nutrient levels (i.e., magnesium, fluoride, iron, etc.), organic nutrient levels (i.e., ammonia, nitrogen, phosphorus, etc.), and bacteria. These parameters are graphed and compared to water quality standards that indicate safe and healthy water. Water quality trend analysis has been ongoing since 2009 and has shown all parameters tested to meet or exceed water quality standards, with the exception of One Mile spring, which sometimes has high levels of bacteria due to frogs that live in the spring. Even with these results, staff recommend only drinking from our approved drinking water well at the Reservation. Remember to always filter or boil spring water before drinking!



WATER QUALITY & GAME CAMERAS

Nonpoint Pollution Springs Work

Nonpoint source pollution is pollution that can't be traced back to certain outputs. Examples of nonpoint pollution include snowmelt, drainage runoff, animal interactions (feces) and human interactions (oil or fertilizer). This past summer, our staff performed vegetation surveys and collected water quality and invertebrate samples from Tule and Slide springs, and continued to collect water quality data from One Mile spring. Slide and Tule are located in the southern area of the Reservation and One mile is located on the northern side. Water quality data is collected to test bacteria, metal, and inorganic material located in the springs. The vegetation surveys are used to calculate the different species growing around the springs. We also have installed wildlife cameras, stream gauges, and data loggers at Tule and Upper Slide springs. This way we can record data that can be used for future restoration projects to prevent nonpoint source pollution.



Game Cameras

During the 2022 field season, staff deployed 12 game cameras at Upper Tule, Lower Tule, and Slide springs. Ten of the game cameras are motion activated and will capture images of wildlife species utilizing the springs (some of these images were used in the 2023 calendar). These images will help us assess how wildlife species and trespass species (feral horses and cattle) are using the major springs within the Reservation. These images will lead to a better understanding of how wildlife use of these springs changes once the springs are fenced off to prevent trespassing species from utilizing them as well. Two of the 12 game cameras were set to take images an hour after sunrise and an hour before sunset every day of the year at Lower Tule and Slide springs so staff can visualize how the water levels at these springs changes over time. If you want to see more game camera footage, follow us on Instagram: [sloptnrd](https://www.instagram.com/sloptnrd).





CHRONIC WASTING DISEASE INFORMATION



What is Chronic Wasting Disease?

Chronic Wasting Disease (CWD) is a highly contagious neurological disease like Mad Cow Disease (BSE) but instead affects deer, elk, reindeer, and moose. To date, there have been no reported cases of CWD infection in people. However, CWD has been found to pose a risk to non-human primates like monkeys, which raises concerns that there may also be a risk to people.¹

CWD and BSE are prion diseases that cause abnormal folding of prion proteins that lead to brain damage. Prion diseases are also known as transmissible spongiform encephalopathies (TSEs) and are a family of rare progressive disorders that affect both humans and animals. TSEs typically progress rapidly and are always fatal.¹ CWD is transmitted directly through animal-to-animal contact, and indirectly through contact with objects or environment contaminated with saliva, urine, feces, or carcasses of CWD-infected animals. There are no treatments or vaccines currently available.¹



Why are you being told about CWD?

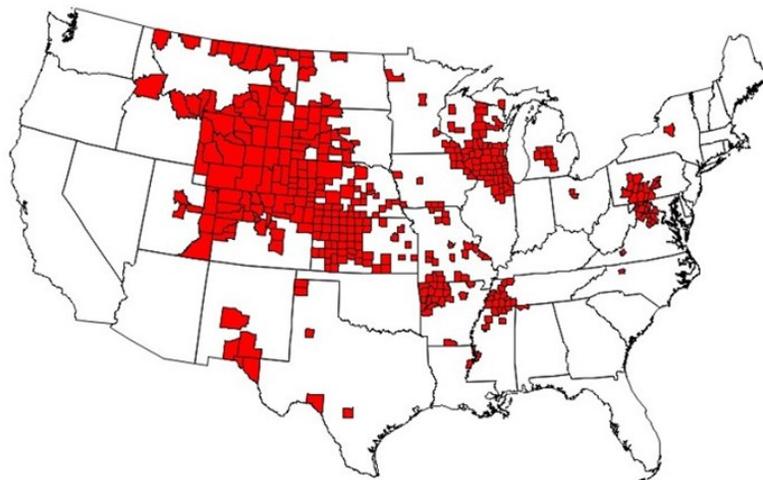
Because of CWD's long incubation period, infected mule deer may be difficult to detect from appearance or behavior alone. So, by distributing information about CWD, Tribal members can make informed decisions about harvesting or consuming mule deer from the Reservation. Additionally, by providing information and gathering samples for CWD



CHRONIC WASTING DISEASE INFORMATION

a long incubation period, averaging 18 – 24 months between infection and the onset of noticeable signs. During the incubation period, animals look and act normally.³

Where is CWD Found?



*Occurrence of CWD based on best-available information (www.cdc.gov).

As of June 2022, 29 states have reported CWD in free ranging cervids such as mule deer and elk.¹ Although CWD has not been detected in Nevada yet, it is likely to arrive in the future based on its continued spread across the United States and presence in neighboring states.

How can a Tribal member get a harvested deer tested?

Hunter participation is voluntary but critical in CWD testing at Summit Lake.

General Field Dressing Safety Precautions: It is recommended to not use household knives or other kitchen utensils, wear protective gloves, minimize handling brain and spinal tissues, and wash your hands and instruments thoroughly when field dressing is completed.

**If you wish to shoulder-mount your deer, cape and remove antlers first.*

Tribal members have the following 2 options for submitting lymph nodes for testing. All testing will be performed by NDOW.

- 1) Tribal member collection then submission to NRD or NDOW.
 - a. Tribal member follows the below video or written instructions to collect the lymph nodes.
 - b. Tribal member drops off the lymph nodes at one of the following locations:
 - i. NRD station at the Reservation
 1. Staff are likely present at the station or on the Reservation Monday – Thursday during the field season (approximately April to mid-November).



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2. NRD will submit the lymph nodes to NDOW.

ii. NRD department at the Tribal office

1. Please notify the NRD department in advance that the lymph nodes will be dropped off. Please call the main office number at 775-827-9670, Monday – Friday, 8am – 5pm, or email slpt.nrd@summitlaketribe.org.
2. Location: 2255 Green Vista Dr. #402, Sparks, NV 89431
3. NRD will submit the lymph nodes to NDOW.

iii. Nevada Department of Wildlife (NDOW)

1. Please notify NDOW in advance that the lymph nodes will be dropped off. Please call 775-688-1506, Monday – Friday, 8am – 5pm.
2. Location: 1100 Valley Rd., Reno NV 89512.
3. **IMPORTANT:** You must present your SLPT harvest tag so that NDOW is aware that the harvest was valid on the Reservation.

2) NDOW collection.

- a. Please notify NDOW in advance that the harvest will be presented for lymph node removal. Please call 775-688-1506, Monday – Friday, 8am – 5pm.
- b. Location: 1100 Valley Rd., Reno NV 89512.
- c. **IMPORTANT:** You must present your SLPT harvest tag so that NDOW is aware that the harvest was valid on the Reservation.

NOTE: Please leave your name and phone number or email with SLPT or NDOW so that you can be notified of the results.

Video instructions to remove the lymph nodes:

<https://youtu.be/xsLhOqNiTWA>

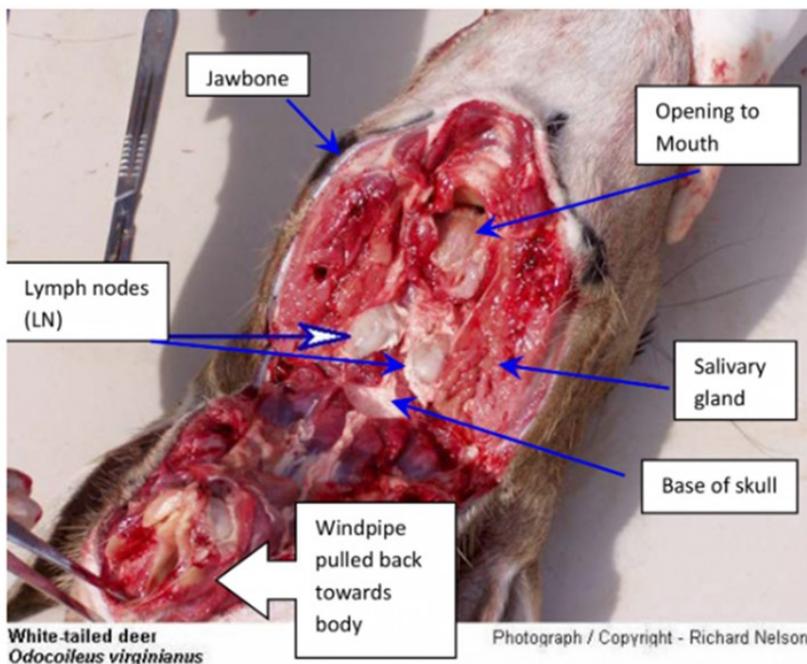
<https://www.youtube.com/watch?v=pUls5iVO1J4>



CHRONIC WASTING DISEASE INFORMATION

Written instructions to remove lymph nodes (*Source: Idaho Fish and Game):

Locate Lymph Nodes



1) Cut across the neck and under the jawbone. Cut towards the ears, through the windpipe until you hit bone.²

2) Pull back the windpipe and cut the muscles towards the base of the skull. Locate the left and right lymph nodes, half-way between each angle of the jawbone and the base of the skull and beneath the opening to the mouth. Lymph node consistency is much firmer and rounder than the surrounding tissue.²

3) Avoid the salivary glands, which are found next to the lymph nodes and are more segmented. Salivary glands are not a CWD testable sample tissue.²

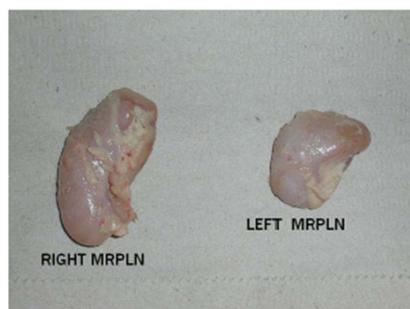
4) Remove the left and right lymph nodes. Remove excess fat and connective tissue from the lymph nodes.²

5) NRD will have sample bags (located in a mailbox near the front gate of the field station) available at the Reservation. Write the sex of the harvest and your name, phone number, or email with ballpoint pen (provided in mailbox) to prevent smearing.²

6) Keep the samples frozen until you can drop them off at the NRD station at the Reservation, the Tribal office in Sparks, or the NDOW office in Reno.

The Natural Resources Department wishes you safe and successful hunting and thanks you for your participation!

View Lymph Nodes



- Lymph nodes are normally light pink or bluish color. They could be red if the animal is head shot.
- Rounded, kidney shaped and roughly the size of the tip of a finger.
- If you cut them in half, you will see marbled coloring.

References and Additional Information

<https://www.cdc.gov/prions/cwd/index.html>¹

<https://idfg.idaho.gov/cwd/sampling/how-to>²

<https://www.usgs.gov/diseases-of-terrestrial-wildlife/chronic-wasting-disease>³



A NOTE FROM THE DIRECTOR

Hello Members! My name is James, and since August 2021 I have been your Natural Resources Department Director.

As you can see from the previous pages, the Natural Resources Department accomplished a lot last and early this year, and I feel that we (Department and Members) should be proud of these achievements. But the real story is about the team. Despite a rocky start to the field season last year by losing several staff members, the remaining staff and new hires rebounded and banded together to achieve amazing progress. And with this productive team and this year's hires, I am confident what we will have another successful year of accomplishments. Please review below some the main projects will be working on this year, from operating the fish trap to kicking off projects to address how to make the Reservation more resilient to climate change.



The Department is excited to be serving you to fulfill the Tribe's Mission! I wish you and your families the best for the upcoming year and hope to see you in the future at the lake and at the Connecting with Summit Lake event on June 3 and 4!



UPCOMING ACTIVITIES

Upcoming Priorities

Year Round (or every season)

LCT research/management: monitoring the migration of juveniles to the lake and capture of fish in the lake for a population viability analysis study.

Bats, migratory birds, amphibians: these cool creatures will continue to be monitored via our stationary and mobile sound recording devices.

Climate, streamflow, lake conditions, and water quality: monitoring the climate, streamflow in Mahogany and Snow Creeks, lake level and conditions, and water quality in the streams, springs, and wells.

Roads: continued maintenance of the roads in and around the Reservation is key to the safe and efficient travel of our staff, members, and visitors.

Wildfire: updating signage, maintaining firebreaks, and monitoring fuel loads.

Spring

LCT research/management (April – May): monitoring the spawning run at the Fish Trap, collection of samples for a genetics study, and a lake bubbler system will be installed to monitor lake level.

Sage-grouse research/management (April – May): lek counts, tracking collared birds, and nest habitat surveys.

Climate change/resilience (TBD – April, May or June): Two projects will be kicked off to plan for improved resilience of the Reservation and LCT to climate change. Field activities for these projects will occur during this period.

Protection of Tule and Slide Springs (TBD – April or May): wildlife friendly fence will be installed around each spring to help keep out trespass cattle and feral horses.

Range management (TBD – April or May): the Reservation boundary fence will be maintained.

Summer

LCT management (June, August): finishing up monitoring the spawning run at the Fish Trap, capturing fish in Mahogany and Snow Creeks for the population viability analysis and the collection of genetics samples.

Sage-grouse (June – August): tracking collared birds, nest and brood habitat surveys, and capturing and collaring birds.

Outreach/volunteer event (June): 2023 Connecting With Summit Lake outreach event for Tribal Members will be held at the Reservation on June 3 and 4.

Range management (June): an invasive plant treatment will be completed.

Fall

LCT management (September or October): Fish passage – removal of irrigation diversion on Mahogany Creek and restoration of that stretch of the creek.

Sage-grouse (September – November): capturing, collaring, and tracking birds.



CONNECTING WITH SUMMIT LAKE

June 3-4 we are planning a **Connecting with Summit Lake Event!** Participants will be able to see and participate in some of the projects going on at the Reservation including Sage Grouse, LCT, boat rides and more! Please RSVP by April 14th.

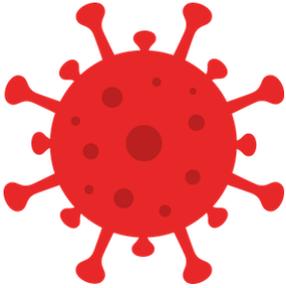
Connect with us on Facebook and Instagram to stay up to date on current activities and events.



@slptnrd



Do you continue to be impacted by the COVID-19 Pandemic?



Have you or your household had loss of income, missed work or lost your job due to the COVID-19 Pandemic? If yes, you may be eligible for Rental, Mortgage and Utility Assistance.

All programs are income restricted and allowable for up to six (6) months per year. If assistance has been received from any other Tribe, you are not eligible for assistance through Summit Lake Paiute Tribe.

Homeowners

The Summit Lake Paiute Tribe has received Homeownership Assistance Funds (HAF) to aid homeowners with Mortgage payments, utility payments including internet.

Renters

The Summit Lake Paiute Tribe has allocated a portion of the American Rescue Plan Act (ARPA) to continue the aid to renters with rental payments, utility payments including internet.

Both HAF and ARPA applications can be found on the SLPT Website in the Housing tab under Emergency COVID Programs. Both applications are PDF fillable. Applications can be emailed to austin.newmoon@summitlaketribe.org for any other questions, please call the office at (775) 827-9670 or the Housing Cell at (775) 447-5716 and ask for Austin New Moon.

Cleaning Supply Bundle

Summit Lake Paiute Tribal Council approved disbursement of cleaning supplies for the membership at the Regular Council Meeting February 18, 2023.

The American Rescue Plan Act (ARPA) allows for PPE and cleaning supplies to be disbursed regardless of income.

- Bundles will be limited to (one) 1 per household. Bundles are averaging a total cost of \$1,200-\$1,400 per bundle.
 - Bundles quantity has been increased and we are hopeful bundles should last families for close to one year.
 - **You must apply for a cleaning bundle.** Ensure the address is correct as what you input is where we are mailing.
 - Items will be ordered and delivered to your home directly through a 3rd party vendor.
 - Items will be ordered in **bulk sizes** at one time. SLPT will **NOT** store any items nor will we have any items on hand to hand out.
 - Bundle will include: Disinfecting wipes, trash bags, mop, broom, disinfecting sprays, disinfecting cleaning sprays, bleach, gloves, masks, COVID-19 Test Kits, disinfecting wand, air purifier, disinfecting soap, disinfecting laundry detergent, hand sanitizer, toilet paper, paper towels, Clorox disinfecting toilet bowl cleaner, sponges and travel disinfecting wipes.
 - Items will be ordered on a first come, first served basis. Please be patient.
-

Please complete the following and return to the Summit Lake Offices at 2255 Green Vista Dr. Suite 402 Sparks, NV 89431 to receive a cleaning supply bundle.

Print Name: _____ Date: _____

Print Full Address: _____

Phone Number: (____) _____

Email Address: _____

Signature of enrolled SLPT Member: _____