



Natural Resources Department Newsletter 2020

Volume 1, Issue 1

Natural Resources Department Newsletter 2020

Fishing Permits Enclosed!

Your Fishing Permit for 2020 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 2020 at 3 fish per adult member and 1 fish per minor.

Inside this issue:

Employee Introductions	2-3
Hunting and Fishing Regulations	4
Fisheries Management Decisions	5
2019: Review	6-7
Director’s Letter and 2020 Activities	8

Weather and Road Conditions

The winter has been relatively mild at the Summit Lake Paiute Reservation this year. Daily temperatures averaged around 29° F from December through February. Summit Lake was still frozen in late February as you can see in the photo to the right, but has since mostly thawed. The creeks are thawed completely and flowing.

At the time of this publication the SnoTel station, installed near the headwaters of Snow Creek in the Black Rock Range, measured a maximum snow depth of 28 inches for the season. The majority of snowfall occurred in December and January with February being unusually dry. According to the U.S. Drought Mitigation



Above: An ice covered Summit Lake on February 21, 2020. Photo Credit: Jaclyn Knapp.

Center’s Drought Monitor, the area is currently classified as abnormally dry. With such a dry February, the roads to and on the Reservation are in good condition for this time of year. Most roadways are clear of snow and dry. However, please be advised that the roads along Upper Mahogany Creek and Snow Creek are reported to still be snow covered and

should be avoided until conditions improve. Even with generally good road conditions, travelers are still 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.

Returning Employee!

JAMES WADDELL

Fish and Wildlife Biologist



Hello, my name is James Waddell and I am pleased to return to the Natural Resources Department as a Fish and Wildlife Biologist. 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 work with both the Lahontan cutthroat trout and sage-grouse is one that I am grateful for. Additionally, I am also excited to begin 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.

Returning Employee!

JACLYN KNAPP

Fish and Wildlife Biologist



Hello, my name is Jaclyn Knapp, I am returning for another season with Summit Lake Paiute Tribe. I will spend most of my time with the sage-grouse this year. Last year, I was getting to know the sage-grouse and the status of the local population that uses the Summit Lake Reservation. I am excited to expand my knowledge and understanding of the population in the area in order to understand what factors are causing the population to decline. I am also excited to be involved with many other projects that will be happening this year including working with the Lahontan Cutthroat trout. My background consists of working extensively in the great basin and I have a deep passion for this ecosystem and all the creatures within it. I have particular interest in conservation biology and population dynamics and hope to continue to enhance the knowledge and protection of the species that live on and around the reservation.

Returning Employee!

ELIZABETH SCHMID

Natural Resources Coordinator/Biologist



Greetings! My name is Elizabeth Schmid and I am delighted to begin my third year with the Natural Resources Department. I grew up in Wisconsin and received a Bachelor's degree in Biology from the University of Wisconsin Stevens Point. I moved to the Reno area in 2013 after falling in love with the terrain and have since been happy to call it home. I have a variety of experience in biological, environmental, and educational work all of which I love that I am able to apply in my job everyday!

I am grateful to be able to promote the conservation, protection and enhancement of Tribal natural resources. I look forward to continuing to assist with the implementation of the natural resources and environmental programs of the Summit Lake Paiute Tribe. 2020 is going to be a great year!

CORY BURDETTE

Returning Employee!

Maintenance Worker

Hello, my name is Cory Burdette and I am glad to be returning this season as a Maintenance Worker for the Tribe. I have experience in a variety of trades. There is an endless supply of maintenance projects at the Lake which I am happy to attend to. I look forward to making great progress this year and can't wait to get started!

VICTORIA CERNOCH

New Employee!

Environmental Specialist

Hello! My name is Victoria Cernoch and I am happy to be joining the Tribe's Natural Resources Department as an Environmental Specialist. I grew up in the Reno area and obtained my Bachelor's in Wildlife Ecology and Conservation at the University of Nevada, Reno. I have several seasons of field experience in the Great Basin identifying and measuring the plants of northern Nevada. I've also had a range of experiences in natural resources, from spying on black-backed woodpeckers to handling the majority of the preserved fish specimens housed in the UNR Natural History Museum Ichthyology Collection. (Working with plants is my favorite, by far.)

I am excited to be joining the Summit Lake Paiute Tribe to conserve and enhance your natural resources. My work will mainly revolve around monitoring water quality and managing invasive weeds — all with the goal of protecting your lands. When I'm not battling weeds or checking that the reservation's waters continue to support Lahontan cutthroat trout — you could find me rock climbing, backpacking, and fly fishing all around Nevada. (But I'm excited that I'll get to spend most of my time up at Summit Lake!)



MEGHAN BROWN

New Employee!

Natural Resources Technician

Hello, my name is Meghan Brown and I am so very excited to working with the Summit Lake Paiute Tribe for my first year, working as a Natural Resources Technician.

I am originally from the Eastern Seaboard from the small town, Milford, New Hampshire. I grew up in the New England area, learning to hunt, fish, trap and farm from my grandfather. Through him and beyond I developed a deep love an appreciation for our Wilderness and Protected Areas. In 2018, I graduated with a B.S. in Wildlife Conservation & Ecology from the University of New Hampshire. Through the college I had the opportunity to work closely with a variety of people, landowners, nonprofits, and government entities focused on conservation of critical habitats, state-listed species, and invasive species management.

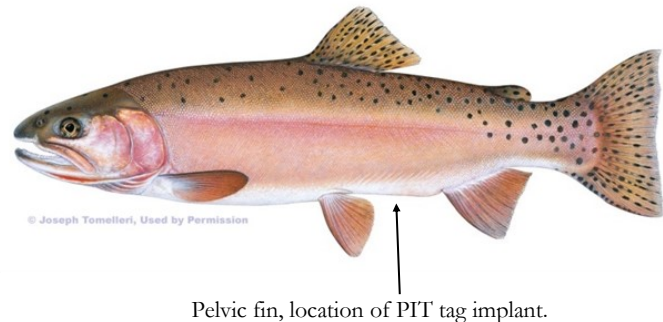
I moved to Reno, in 2019, working on various conservation projects with a large variety of people (Great Basin/AmeriCorps, The Nature Conservancy, Rocky Mtn. Research, Desert Research Institute). I have also worked closely with the USFS on the state's Seeds of Success Program. When I am not working, I am reading, hiking, camping, hunting/fishing, painting/sketching natural areas, or playing my banjo.



2020 Tribal Hunting and Fishing Regulations

Regulations for 2020 Fishing Season:

- Fishing limits for 2020 were established by the Tribal Council at the March 07, 2020 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 2020.**
- 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 Field Station (formerly known as the Tribal Compound) to be scanned for the presence of a PIT tag so that it can be removed before eating. The diagram to the right shows where PIT tags are located in fish.



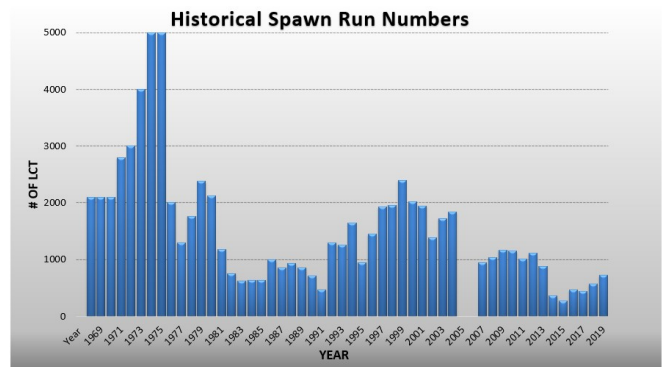
Regulations for 2020 Hunting Season:

- Hunting within the 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 07, 2020 meeting the Tribal Council supported continuation the sage grouse hunting moratorium for 2020. Based on preliminary data from the study, the sage grouse population is showing indications of a concerning downward trend.

Fisheries Management Decisions

Throughout 2019, various fisheries management activities were conducted. The annual spring spawn run of LCT was monitored from March to June at the fish trap on Mahogany Creek. A total of 719 spawning fish passed through in 2019. This number is up slightly from the last four years, likely due to increasing stream flows experienced recently. Despite this small increase, the number of fish entering the creek to spawn over the last five years continues to be dramatically lower than historical spawn run numbers.

A continuing study has been employed over the last several years to better understand the fluctuations in the number of spawners and attempt to estimate the current population size. Population estimates suggest that the number of adult fish in the lake is still alarmingly low but appears to be slowly rising since 2015. The population fluctuation may be explained by a variety of factors relating to the severe drought that the region recently experienced (2012-2016). This could potentially mean that the population is beginning to stabilize from the adverse effects of the drought as more water becomes available to the system. However, the data suggests that the population is still



Above: Graph of historical spawn run numbers through 2019.

recovering and is at risk of continuing its downward trajectory if immediate conservation actions are not taken.

Until we can confidently confirm that the population will rebound to pre-drought numbers, the Natural Resources Department recommended to the Council that the fishing limits of 3 fish per adult and 1 per child implemented in 2019 remain in effect for 2020. Additional work is continuing this summer by the Natural Resources Department to increase the accuracy of these findings and implement management strategies to support preliminary recovery from the recent drought.

2019 Fisheries Activities

The Natural Resources Department continued to conduct fisheries-related activities throughout 2019. The annual spring spawn run was monitored from March to June 2019. Fish headed upstream to spawn in Mahogany Creek must swim into the fish trap. There, staff weighed and measured the fish to determine their health, and safely returned them to Mahogany Creek upstream of the fish trap where they continued their journey to spawn. This information is used to understand how the spawn run changes through time.

In the spring, summer, and fall, boats and nets were used to capture fish from the lake. The fish were PIT (passive integrated transponder) tagged and released back into the lake. Their movement was then tracked throughout the year, allowing employees to better estimate fish numbers and track movement patterns. Fish were also captured and PIT-tagged from Mahogany and Summer Camp Creeks using various methods throughout the year. Since 2012, the staff has utilized PIT tags placed in fish to track movement throughout Summit Lake and Mahogany Creek. These transponders can be detected by stationary monitoring equipment along Mahogany Creek as well as identify individual fish when staff members catch them. This information allows us to calculate population estimates through time.

In the spring and fall, the effort to better understand the number of young trout moving from the creek to the lake was continued. To do so, nets were placed in Lower Mahogany Creek. The fish were weighed and measured and then returned to the stream where they could continue on their way to the lake. This information is then used to estimate the total number of young fish returning to the lake. In addition to monitoring the fish directly, the Department continues to track the effects of climate change on the LCT fishery. This work is accomplished using in-stream measuring devices that continuously record stream temperature and amounts of water at various locations on the Reservation and surrounding lands.

2019: Year in Review

Noxious Weed Management

The Natural Resources Department continued to manage noxious weeds on the Reservation in 2019. Various management techniques were used to do so based on best practices for each noxious weed species, the location of infestation, and weather conditions at the time of treatment.

Bull, Canada, and scotch thistles were removed mechanically with hand tools. Herbicide treatments were used to treat hoary cress and perennial pepperweed. A new treatment for tamarisk was implemented in Spring 2019 that has shown promising results: the cut and paint method. In this method, the tamarisk plant is cut down to a small stump, then an herbicide is painted directly onto the cut surface of the stump which will more easily soak up the chemical than the outer surface of a plant. This targeted method ensures that the tamarisk plant is being effectively treated while not impacting any



Above: A member of the noxious weed crew treating a tamarisk plant with the cut and paint method. Photo Credit: GBI.

nearby native vegetation and further minimizes the likelihood of the chemical being washed away in rain. All cut and painted tamarisk plants were checked in the fall and showed no signs of regrowth; an encouraging win in the noxious weeds war!

Sage Grouse Study

Below: An apparently successful nest site located by staff through tracking efforts. The habitat surrounding this nest was cataloged to help determine nesting requirements. Photo Credit: Jaclyn Knapp.



Several Tribal members have noted dramatic declines in numbers of Greater Sage Grouse over the last few

decades, a phenomena that is occurring throughout the range of the species. The Department's Sage Grouse study is intended to better understand the population trend occurring in this area as well as to understand their habitat requirements.

In the spring, several lek counts were taken in which staff take count of males and females present at historical mating sites during their mating rituals. To complete a lek count staff remain a considerable distance away from the birds and use spotting scopes and high powered binoculars to determine the number of birds present without disturbing them. These counts help with population estimates.

Staff captured and put tracking devices on 13 new birds in 2019, bringing the total number of trackable birds to 23. Throughout the year, fixed wing airplane flights helped locate the radio collared birds, for employees to see what types of habitats males and females were using. This information is intended to be used to improve and protect these and similar habitats on the Reservation.

2019: Year in Review Continued...



Left: Lab facility installed at the One Mile building. Photo Credit: Victoria Cernoch

One Mile Building Improvements

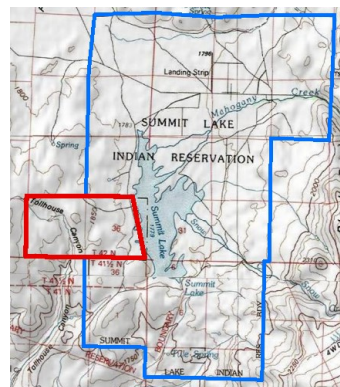
Several improvements were made to the Tribal building located near One Mile Spring in 2019. Through funding from the Environmental Protection Agency (EPA), Natural Resources Staff were able to install a lab facility that has been sorely needed for water quality projects. In addition, several improvements have been made to the building to reduce non-point sources of pollution including upgraded plumbing and rodent proofing.

Water Quality

Water quality is tested three times annually. Various measurements and water samples are taken from several designated lake, stream, and ground water sites throughout the Reservation. These samples are tested for nutrients, bacteria, and chemical composition. The results help us to understand the natural processes of the Summit Lake Watershed, informs us of the health of the ecosystem, and indicates safety for human use.



Left: Natural Resources staff collecting water quality samples at a designated stream sampling site. Photo Credit: James Waddell.



Left: Map of Summit Lake Indian Reservation displaying the two sections of land acquired in 2016 outlined in red.

Assessing and Protecting Land

In 2016, through the Nevada Native Lands Act, the Tribe acquired two sections of land west of Summit Lake. In 2019, staff surveyed this land to assess water quantity and locate potential sources of non-point source pollution and any other sources of concern. This information will be used to implement best management practices to better protect and enhance the area. In addition, staff installed several road signs along the road through the area to better inform passersby of Tribal jurisdiction.

Reseeding

Staff worked on a seeding pilot study on the Reservation airstrip in order to restore a mowed fire break with native bunchgrasses and forbs and test the effectiveness of seeding techniques. By seeding a firebreak, the recently mowed area is expected to act as a vegetative firebreak and aid in habitat restoration. The goal is that this vegetative fuel break will protect important habitats from wildfire while also preventing invasive plant encroachment.



Left: Staff loading seed into seeder. Photo Credit: Jacklyn Knapp.

A Note from the Department Director

Hello Tribal Members!

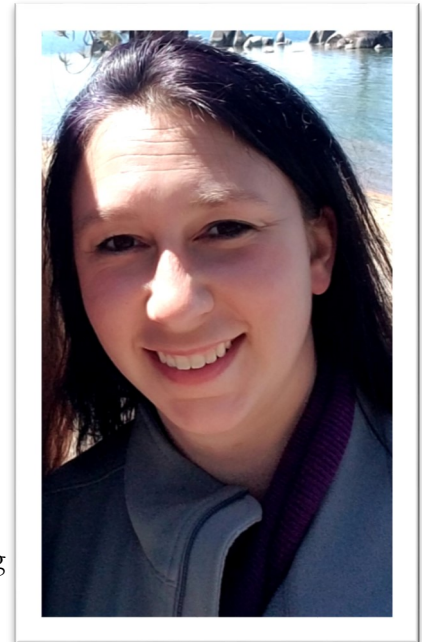
I can't believe another year has come and gone and it is already time to prepare for the 2020 field season.

Last year was jam-packed with activities for the Natural Resources Department, and this year is shaping up to be no different! We are excited about starting a bat monitoring program, expanding our fisheries, sage grouse, vegetation management, and water quality programs, and planning a workshop.

Over the past year we lost a few employees and gained several new ones, and they will all contribute to moving our work forward. Although this was a fairly mild winter, the lake is still frozen. We are anxiously waiting for spring and all the wonders it brings.

I am thankful for the opportunity to continue serving as the Natural Resources Department Director, and look forward to speaking with any of you by email, phone, or in person either at the Reservation or at the Tribal Office.

Sincerely,
Rachael Youmans



Activities Planned for 2020

Some of the exciting projects the Natural Resources Department has planned for 2020:

- Activities surrounding LCT management: managing the spawn run at the Mahogany Creek Fish Trap, additional capture of fish from the lake and streams for PIT tagging, water quality and meteorological monitoring, and hydro acoustic surveys of the lake.
- Tribal employees will continue studying sage grouse throughout 2020 by completing Lek counts, collaring birds, tracking those that are collared, 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 its information to our data.
- Noxious weed treatment will resume in 2020 to continue the fight to preserve the Reservation's native vegetation and landscape. Please let us know if you notice noxious weeds on the Reservation so they can be treated.
- A new project will begin in 2020: Bat Monitoring and Inventory. Through this project we hope to gain a better understanding of bat species present on the Reservation.

The Tribe has become more reliant on the Tribal website to communicate announcements with Tribal members to reduce the cost of mailings. Please frequently check the Tribal website for Job Announcements, Council Meeting agendas, and the recently added Natural Resources Department tab. Check out the website: www.summitlaketribe.org

SUMMIT

LAKE

PAIUTE

TRIBE

NATURAL

RESOURCES

DEPARTMENT

Primary Administrative
Office
1001 Rock Blvd
Sparks, NV 89431

Phone: 775-827-9670
Fax: 775-827-9678

