

Final Report on 2016 Funding from the Western Native Trout Initiative for “Gone Fishin’” Camp at The Discovery - \$3,000



The Terry Lee Wells Nevada Discovery Museum (The Discovery) thanks the Western Native Trout Initiative for your support of The Discovery’s “Gone Fishin’” Camp with a grant of \$3,000.

The Discovery decided to schedule the “Gone Fishin’” camp during the one-week fall Washoe County School District break from October 3-7, 2016, rather than extending our planning out to spring 2017. This timed well with the recent closing of National Geographic’s *Monster Fish* traveling exhibition in early September, as we began completing our run of broader fish-related programming.

As a result, we condensed the two weeks of camp proposed (1 week for grades 3-4; and 1 week for grades 5-7) into one week of a combined 3rd through 7th grade camp focused on learning about the conservation of Lahontan Cutthroat Trout, their habitat, and Northern Nevada’s larger watershed. We decided to run this camp in the fall of 2016 while community excitement about fish-related programming was still high, rather than waiting to run it again in spring 2017.

Overall, 22 campers representing grades 3-7 learned about the importance of fish ecology and aquatic biodiversity during this week-long experience in October. A photo of the “Gone Fishin’” campers on the bus traveling to one of their field sites is provided above, and additional photos are attached to this report.

Funding of \$3,000 from the Western Native Trout Initiative (WNTI) supported a variety of activities, described briefly below (final expenditures are outlined in the attached budget to actuals spreadsheet):

- Field site visit, partner coordination, and camp curriculum “refresh” by our Camp Manager primarily, with additional field site and partner coordination support from four other staff members before and during the camp.
- Training one Lead and one Assistant Camp Educators (2 total), and underwriting their time to teach themed activities focused on Nevada’s cold water species and water-related education around the Lahontan Cutthroat Trout (LCT).
- The purchase of supplies and equipment needed to deliver the learning activities outlined in the attached final camp curriculum successfully. Note: A couple of the activities described in the

curriculum attached could not be completed due to time constraints and the realities of “going with the flow” of a traveling camp requiring unique logistical support.

- Support for the higher than budgeted bus transportation costs needed to safely get campers to/from each field site and The Discovery. We utilized one Washoe County School District bus (and driver) to do this during the week of camp.

Gone Fishin’ Camp Activities:

- **Day 1:** Campers spent the day exploring Pyramid Lake with Kameron Morgan, a Water Quality Standards Specialist for Pyramid Lake Paiute Tribe Environmental Department. Campers examined different types of macroinvertebrates, and learned about the importance of insects in sustaining LCT populations.
- **Day 2:** Campers traveled to Lake Tahoe to learn about Nevada’s Great Basin Watershed, our water cycle, and the most effective way to conserve water sources.
- **Day 3:** Campers toured the Verdi Hydroelectric Power Plant, learning about the country’s largest renewable energy source: hydropower. In the afternoon, campers fished at Crystal Peak Pond and explored the ecosystem and habitat surrounding the pond. They were joined by a couple of members of the Reno High School Fly Fishing Club.
- **Day 4:** Campers headed to The Nature Conservancy’s McCarran Ranch Preserve on the Truckee River to see how science can help restore critical habitat for LCT and other wildlife in our ecosystem.
- **Day 5:** On the final day, campers returned to Pyramid Lake to fish with University of Nevada, Reno College of Science Research Professor, National Geographic Explorer and star of “Monster Fish” on Nat Geo WILD, Dr. Zeb Hogan. Campers also had a unique opportunity to learn about the history and culture of the Pyramid Lake Paiute Tribe with Tribal Chairman, Vinton Hawley.



Training and Equipment Highlights:

The Discovery conducted eight hours of Educator training for this camp specifically to ensure that Camp Educators were equipped to effectively deliver learning objectives and scientific concepts such as understanding the water cycle, formulating questions and hypotheses, learning about the fish life cycle, and more!

In addition to Camp Educator time and training, support from WNTI helped The Discovery purchase supplies to round out the educational experience for

“Gone Fishin’” campers. Supplies purchased included fish specimens for use in dissection and fish printing activities, rice paper, field notebooks for scientific observations, and extra fishing gear like hooks, lures, and bobbers. This was all supplemental to the initial generous donation from Scheels All Sports, a local sporting goods store. Scheels provided an in-kind donation of 20 fishing rods, lures, and other equipment

valued over \$1,000. This equipment was utilized to teach campers about catch and release principles, as well as practicing how to use kick skeins/nets in the field.

Additional Camp Highlights:

Fishing with Dr. Zeb Hogan: As the campers arrived at Pyramid Lake and were exiting the bus, Zeb Hogan was there to meet and greet the campers. Many of the campers were star struck to meet Zeb, and one of campers was particularly taken aback and asked, “Are you really Zeb Hogan?” Zeb replied with a smile, “That’s me!” Zeb then joined our three partners from the Pyramid Lake Paiute Tribe to help kids learn about the lake habitat, and practice casting their lures to try and catch an LCT.

Fishing at the Verdi, Nevada ponds: Although many campers did not catch a fish this day, one of the campers caught 3 fish and a frog. Getting the kids outdoors allowed them to experience different natural environments around a body of water in more ways than just fishing.

These highlights were provided by Andy Mugnier, the Assistant Educator during “Gone Fishin” Camp: “When we were at Crystal Peak Pond there was a sweet boy named Sebastian. We were teaching him to cast, and he was really pleased with himself that he learned to do it and didn't need my help anymore.

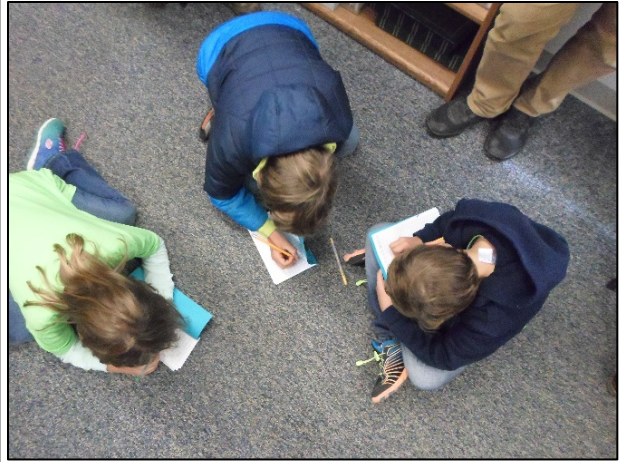
When we went to Pyramid Lake and tested the water (this was the first day of camp when we were with the hydrologists), the kids really got into that. I took photos of one of the campers, Jake, testing the water. The kids really took an interest in the models of a watershed that the water scientists showed us. I think they learned quite a bit during that part of the camp.”

Thank You for Your Support

We thank the Western Native Trout initiative for your support of \$3,000 to facilitate “Gone Fishin” Camp in 2016. Your support was matched by the Trout Unlimited – Sagebrush Chapter with another \$3,000 to ensure this exciting traveling camp focused on learning about the habitat and behavior of the Lahontan Cutthroat Trout and its watershed was successful.

The Discovery appreciates the generosity of donors and partners like you.









Campers and two Educators pose above (in green T-shirts) with Dr. Zeb Hogan and members of the Pyramid Lake Paiute Tribe during the last day of camp activities (and fishing for LCT) at Pyramid Lake.

Description of Service or Activity for "Gone Fishin'" ("Exploration LCT") Camp at The Discovery from October 3-7, 2016	WNTI Grant Dollars (As Proposed) Grant No. 2016-SG13	Actual Expenditures of "Gone Fishin'" Camp	WNTI's portion of Actual Expenditures, i.e. 1/2 of the Actuals (the other half is matched by TU-Sagebrush grant funding)
Camp Supplies e.g. snacks for campers, extra fishing gear including hooks, lures, bobbers, and fishing licenses for adults, etc.	\$ 700	\$ 670	\$ 335.00
Camp Equipment Two radios for communication with base camp at The Discovery while traveling.	\$ 150	\$ 400	\$ 200.00
Partner & Field Site Coordination Includes Camp Manager time (40 hours at approx. \$23/hr) to coordinate with partners and train/instruct Lead and Assistant Educators; and additional support for coordination provided before and during camp from four other staff members.	\$ 232	\$ 1,837	\$ 918.50
Camp/Staff Educator Time 1 Lead Educator and 1 Assistant Educator, plus 8 hours of training for each.	\$ 1,510	\$ 1,410	\$ 705.00
Bus Transportation Costs for renting one bus from the Washoe County School District (and driver) for 5 days of traveling camp.	\$ 408	\$ 1,683	\$ 841.50
Budget Totals	\$ 3,000	\$ 6,000	\$ 3,000.00
(does not include the value of in-kind equipment or partner staff time)			

Fall Break 2016





Bring on autumn at The Discovery!

Get into concoctions, creations, chemistry, bugs, engineering, art, and more at Camp Discovery. Each camp is hands-on and age-specific, so there's something new and exciting to learn each and every day. Camps are designed for students in 1st through 7th grade, but they fill up fast, so register today!



Bonus!

Every registered camper receives a super-cool T-shirt to keep!

Fall break, October 3-7, 2016



Science Magic – Grades 1-2

In this eye-opening camp, you'll conduct tons of hands-on experiments that at first glance look like acts of magic, but when you look a little closer and ask a few questions, you will find they're actually science! See an egg get sucked into a bottle, pull a tablecloth out from under a table full of dishes, watch colored water magically resist mixing, see a tea bag take off into the air, explore a balloon that refuses to pop, and so much more!

Member: \$200 **Nonmember:** \$225



Gone Fishin' – Grades 3-7

Lahontan Cutthroat Trout are a native and important species to Northern Nevada. In this exciting and educational traveling adventure, campers will get to witness how fish migrate, spawn, and survive in our arid desert climate. Traverse our region to visit a working fish hatchery, check out the Verdi hydroelectric plant, take and study water samples, and even learn how to fly fish like an expert. This camp culminates with a fishing trip led by University of Nevada College of Science professor, National Geographic Explorer and star of the "Monster Fish" television show, Dr. Zeb Hogan.

Note: Campers age 13 years or older are required to have a valid Nevada fishing license. The Discovery will assist campers with obtaining a license. For more information, please call 775-398-5921 or e-mail camps@nvdm.org.

Member: \$250 **Nonmember:** \$275

Financial assistance available

Through the generosity of the museum's donors, The Discovery offers financial assistance to support the educational needs of children from families that cannot afford the full cost of the museum's camps. For more information, and to apply for assistance, visit nvdm.org, call **775-398-5954** or e-mail camps@nvdm.org.

Find out more and register at nvdm.org

Frequently asked questions

- Camp Discovery begins at 9:00am and ends at 4:00pm each day. Early drop-off at 8:00am and late pick up until 5:30pm are available for an additional fee.
- All of The Discovery's camps have designated museum exploration time throughout the week.
- Camp Discovery's sessions are full-week camps. Daily drop-ins cannot be accommodated.

Gone Fishin' camp supported in part by grants from the Trout Unlimited-Sagebrush Chapter and the Western Native Trout Initiative.



490 S. Center Street · Downtown Reno
775-786-1000 · nvdn.org

Fall 2016 Camp Discovery Schedule

Thank you for your interest in Camp Discovery during WCSD's fall break, October 3-7, 2016. Camp Discovery begins at 9:00am and ends at 4:00pm each day. Early drop-off at 8:00am and and late pick up until 5:30pm are available. For help with registration, please e-mail camps@nvdm.org or call 775-398-5954.



Fall Break, October 3-7, 2016

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Cancellation/refund policy

The Discovery has a no refund cancellation policy. If you need to transfer sessions or make other changes to your registration, please call us at 775-398-5954 or email camps@nvdm.org. There is no fee for transferring from one session to another. However, if you register online for a new camp and then want to cancel your original registration, our standard cancellation policy will apply. Please note, transfers are limited to camps with available space.

Camp Discovery

Fall 2016 Camp Discovery Schedule

Before/After Care

Early drop off beginning at 8:00am and late pick up from 4:00 to 5:30pm can be added to any camp registration using the links below.

October 3-7, 2016

Camp Discovery FAQ

Do you have a question about Camp Discovery? Check out this handy guide:

 [Camp Discovery FAQ](#)

Leave a Review



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Stay informed about everything happening at the museum—sign up for The Discovery's e-News!



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Danielle Williams

From: The Discovery - Terry Lee Wells Nevada Discovery Museum
<newsletter=nvdm.org@mail102.suw11.mcdlv.net> on behalf of The Discovery - Terry
Lee Wells Nevada Discovery Museum <newsletter@nvdm.org>
Sent: Thursday, September 22, 2016 2:01 PM
To: Intern-Development
Subject: Register today for fall break Camp Discovery

Camp Discovery

Special Invitation



Register today for fall break camps at The Discovery!

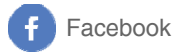
Get into concoctions, creations, chemistry, bugs, engineering, art, and more at **Camp Discovery**. Each camp is hands-on and age-specific, so there's something new and exciting to learn each and every day. Camps are designed for students in 1st through 7th grade, but they fill up fast, so register today!



[View Fall Break Schedule, Oct. 3-7](#)

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Multi-day Camp
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<p>Day One Morning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bus Leaves at 9:30am <input type="checkbox"/> Arrive @ Pyramid Lake 10:15am <input type="checkbox"/> Water Specialist Kameron Morgan Tour, macroinvertebrates 	<p>Day One Afternoon:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lunch <input type="checkbox"/> Hands on activities <input type="checkbox"/> Return to museum by 4:00pm
<p>Day Two Morning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bus leaves at 9:30am <input type="checkbox"/> Arrive at McCarran Ranch Preserve <input type="checkbox"/> Restoration Project 	<p>Day Two Afternoon:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lunch <input type="checkbox"/> Fish, river life collection <input type="checkbox"/> Return to museum @ 4:00pm
<p>Day Three Morning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bus leaves at 9:30am <input type="checkbox"/> Arrive Verdi Hydroelectric plant @ 10:00am 	<p>Day Three Afternoon:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lunch <input type="checkbox"/> Fish Crystal Peak Ponds/Truckee river <input type="checkbox"/> Return to museum @ 4:00pm
<p>Day Four Morning</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bus Leaves at 9:30am <input type="checkbox"/> Arrive @ Sand Harbor Incline Village <input type="checkbox"/> Fish for crawdads 	<p>Day Four Afternoon</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lunch <input type="checkbox"/> Activities <input type="checkbox"/> Return to museum @ 4:00pm
<p>Day Five Morning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Bus leaves at 9:030am <input type="checkbox"/> Arrive @ Pyramid Lake 10:15am <input type="checkbox"/> Fish with Zeb Hogan <input type="checkbox"/> Museum tour and Story telling 	<p>Day Five Afternoon:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lunch <input type="checkbox"/> Other side of the lake tour <input type="checkbox"/> Return to museum @4:00pm

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Day One – Pyramid Lake

Advanced Preparation/Material Development:

1. Fill Water Jug with fresh water
2. Prep Snacks (2 snacks for the day)
3. Have handouts with destinations and activities for parents

Day One:

- **(until arrival) Coloring Page – (10 min)**
- **Intro to the Camp: (10min)**
 - o Meet someone new
 - o Go over rules of camp
 - o Go over museum wide rules (if time)
 - o Hand out Fish Journals
 - o Check that all campers have a lunch, water bottle, jacket.
 - o Load up on bus (have a copy of the roster for the bus driver)
- **Arrive: Pyramid Lake & Meet up with Kameron Morgan**
 1. Kameron has a full day of activities for the group. Please follow his lead and instructions.

Day Two:

Advanced Preparation/Material Development:

1. Fill Water Jug with fresh water
2. Prep Snacks (2 snacks for the day)
3. Bring all fishing gear including live bait

Day 2 – McCarran Ranch Preserve

1. Morning restoration project
2. Lunch

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3. Hike
4. Meet with the scientists
5. Fishing and catching river life
6. Importance of restoration and preservation of our Water

Day Three:

Advanced Preparation/Material Development:

1. Fill Water Jug with fresh water
2. Prep Snacks (2 snacks for the day)
3. Bring all fishing gear including live bait

Day 3- Verdi Hydroelectric Plant and Fishing @ Crystal Peak Park Ponds

Arrive: Verdi Hydroelectric plant Tour
2nd destination: Crystal Peak Ponds

Lunch: 20-30min

Fish the ponds/Truckee River

Life and Death in the River

Day Four:

Advanced Preparation/Material Development:

1. Fill Water Jug with fresh water
2. Prep Snacks (2 snacks for the day)
3. Sand gear: Shovels, buckets, (Design a sand Fish)
4. Crawdad Traps, materials to design a crawdad device.
5. Water Color paint, brushes, and large paper

Day four – Lake Tahoe (Sand Harbor)

- **Arrive at Sand Harbor: Snack**
- **Design a Sand Fish (Take Pics)**
- **Lunch (20-30min)**

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- **Paint the Lake (water color paintings and paper)**
- **Crawdad Hunting:** What are crawdads and why are they important?

Day Five:

Advanced Preparation/Material Development:

1. Fill Water Jug with fresh water
2. Prep Snacks (2 snacks for the day)
3. Bring all fishing gear including live bait

Day 5: - Pyramid Lake

Arrive: Pyramid Lake @ 10:15am

Fish with Zeb Hogan 10:30am – 11:30am

Lunch 20-30min

Museum Tour

East side of the lake tour with tribal members:

Campers will experience something very rare and sacred as the Pyramid Lake tribal members will be taking the camp to the east side of the lake which has been prohibited and off limits to visitors. Campers will experience the stories behind the woman and her basket as well as get a close up look at the pyramids themselves.

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Woman and the Basket:

Stone Mother

One day the father of all Indians came to this area and lived on a mountain near stillwater. It is said that he was created near Reese River. He was a very great and good man. He was very lonesome and wished he had someone to keep him company.

One day, much later, Woman heard about man. She was married to Bear. She wished that someday she might see Man, and this made Bear very jealous. One day Woman and Bear had a fight. They fought for a long time and finally she knocked him down and killed him with a club. She decided to leave the country and go north in search of Man. She had many interesting experiences on her trip. Even today, her footprints can be seen along Mono Lake.

Near Yerington, she fought a giant who tried to eat her. She managed to kill him and his body turned to stone, where it can also be seen today.

She arrived at Stillwater Mountain at last. There she saw Man who was so handsome. She hid from him in for fear he might leave. One day, as Man was walking around he saw Woman's tracks. He started to look for her, and called out, saying that he knew she was around. At last she came out from hiding. She was nervous and very tired from her trip. He noticed this and spoke to her kindly. He asked her to go with him to his camp where he would give her food. She meekly followed him.

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After they finished eating, Man asked Woman to stay with him. That night she stayed near the fire. The next night she slept by the door. Each night she moved a little closer. On the fifth night they were married. They had many children.

Their first born was a boy who was very mean. He was always causing trouble among the other children. One day when they were fighting, the father called the children together to talk to them. He told them that if they continued to fight he would have to separate them. They started fighting before he finished talking.

Man became very angry. He stopped them and said, I am going to separate you now. I shall go up to my home in the sky. When you die you will come up to me. All you have to do is follow the dusty-road (pointing to the Milky-Way). You will reach my home where I shall be waiting. Some day I hope that you will all come to your senses and live together in peace

Slowly he called the oldest boy and gave him one of the girls. He sent them west. They became the Pitt-Rivers. The other children who were peaceful, he kept at home. He told them that they were to take good care of their mother whom he was leaving with them. They became the "**Paiutes**". Then he went up into the mountains then up to the sky.

The Paiutes grew into a strong Tribe, but woman still grieved for her other children. Woman was so sad that she began to cry bitterly. She missed her other children very much. She cried more and more each day.

One day she decided to sit near a mountain where she could look toward Pitt River country. She sat there day after day crying. Her tears fell so fast that they formed a great lake beneath her. This became "**Pyramid Lake**". She sat so long that she turned to stone. There she remained to this day, sitting on the Eastern shore of Pyramid Lake, with her basket by her side.

The "Kuyuidokado" (Pyramid Lake Paiutes/Cui-ui eaters) call her "**Stone Mother**".

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Pyramid Lake Paiute Tribe

Museum Activities:

(These are activities that can be done at the museum or out in the field)

1. Make a water filter out of a 2 liter bottle
2. Fish Prints with real fish and ink
3. Look at water samples taken from different lakes/rivers/ponds
4. Fish Cart dissection/videos

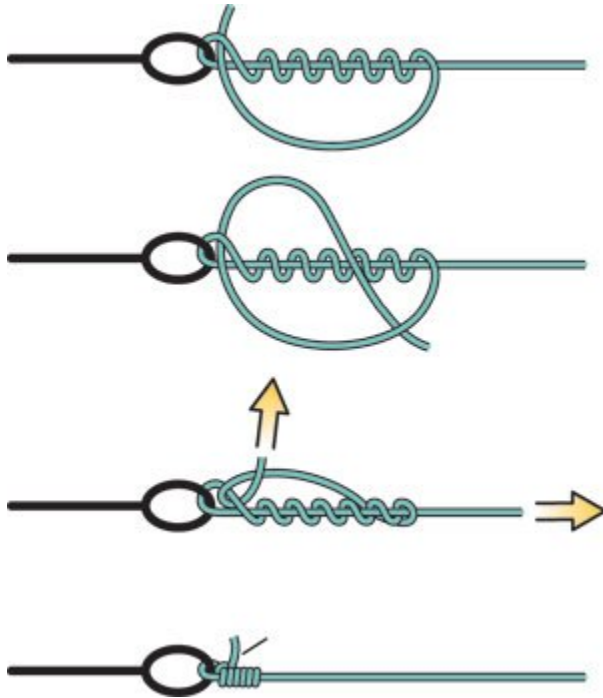
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5. How to tie fish hook

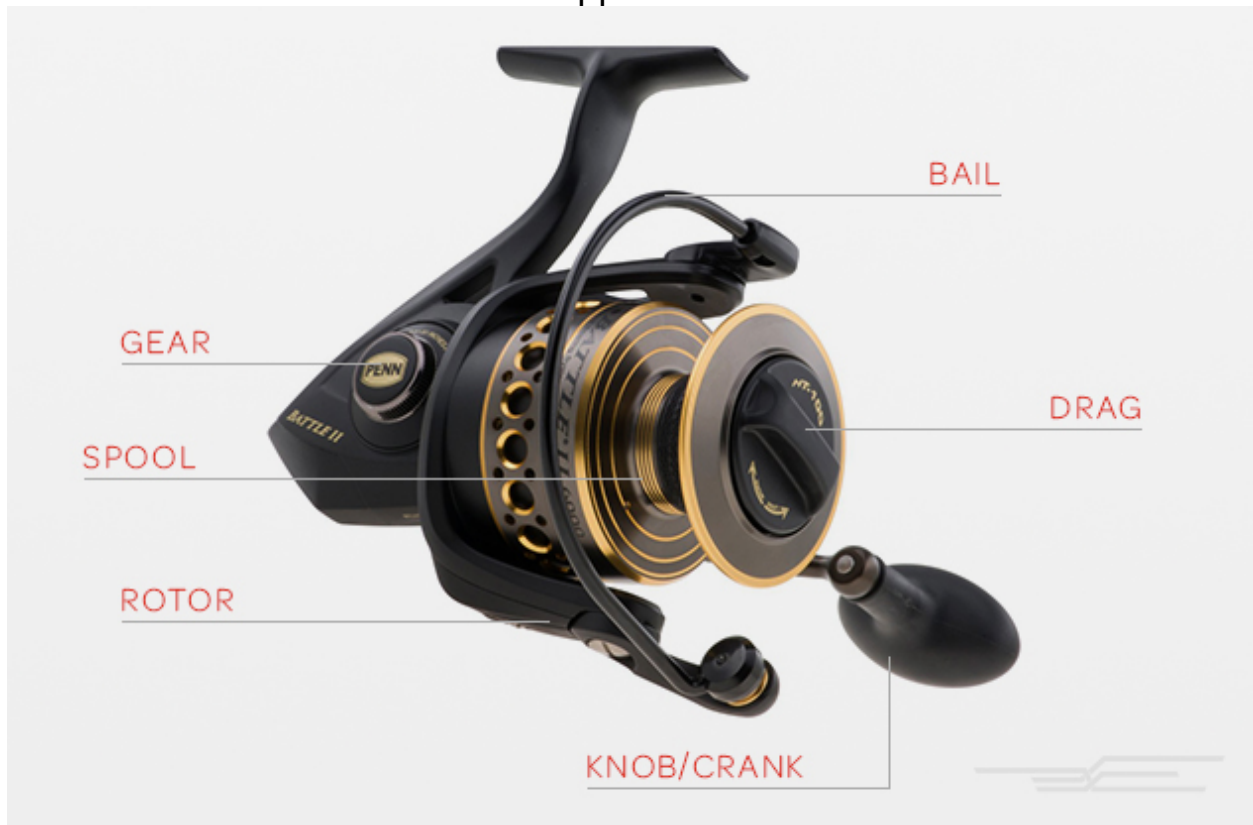
knots <https://www.youtube.com/watch?v=spk0ZwswMEg>

This Activity should be done First thing on day two as campers will need to know how to fix their fishing poles and tie basic fishing knots.



1. Thread the line through the eye of the hook, then make 5 to 7 wraps around the line with the loose end.
2. Thread the loose end of the line through the loop closest to the eye, then back around inside the loose section of line.
3. Pull both ends of the line until tight.
4. Trim the loose end of the line if necessary.

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Parts of a fishing reel:

Campers will learn the parts of a fishing reel and their function. This will help with fixing the poles as well give basic knowledge of how a reel works. Use this diagram and compare it with the poles and reels provided. Have the campers point to the parts on their own reel as you go through the parts.

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20K+

Supplies Needed:

- Plastic fish (or mermaids or sharks or turtles)
- Liquid Starch
- Elmer's Glue (I used blue glitter glue)
- Treat bags (mine were plain bags but the shaped treat bags look like a fish bowl! perfect!)
- Twine or ribbon

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Add 1/4 cup of water to a bowl. Next add one container of clear glue or glitter glue to your bowl (about 1/2 cup or basically the entire 6 oz container of glue). Stir very briskly or use a whisk. Stirring gently won't incorporate the water into the glue- you don't want the water to remain separate as you can see above. Stirring with a fork or whisk will bring both ingredients together.

Now add 1/2 cup liquid starch to your mixture and again stir well to incorporate. After stirring I like to let it sit for maybe 5-10 minutes and that allows the rest of the water to be absorbed and it also seems to harden the slime up just a bit to make it easier to handle.

Knead the slime with your hands until it feels bouncy and stretchy. I placed the slime in my treat bag in a ball. The slime will mold to a big blob at the bottom so I placed the fish in the slime in the front of the bag and on the top after putting the slime in the bag. Tie with a ribbon and present your fish in a bag.

Day 2:

Fun Facts & History Lake Tahoe

Information provided by the U.S. Geological Survey and the U.S. Forest Service.

Why is it so blue?

Tahoe's clean air and water are the keys to the Lake's dazzling blue color. The surface of Lake Tahoe is blue in part because it's reflecting the sky, but there is more to this phenomenon. Water as crystal clear as Tahoe's absorbs red light, leaving the rich blue color that we all see.

How clear is the water?

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Tahoe is so clear that in some places objects can be seen to depths of over 70 feet. One reason is that 40 percent of the precipitation falling into the Lake Tahoe Basin falls directly upon the Lake. The remaining precipitation drains through the marshes and meadows, which are a good filtering system for water. Unfortunately, many of the Lake's natural filtering systems have been disturbed by development and Tahoe's clarity is diminishing. [Read more](#) about Tahoe's clarity.

Why is Tahoe losing clarity?

Recent water quality research has shed more light on the causes of the decline in lake clarity. Lake Tahoe is experiencing a phenomenon known as cultural eutrophication — excessive algal growth due to excessive nutrient levels. Nitrogen and phosphorus from automobile emissions and urban and forested areas act like fertilizer to accelerate algal growth.

Aside from the negative impacts of nitrogen and phosphorus, scientists have identified fine sediments as the primary source of lake clarity loss. Fine sediments are tiny, ground up particles — much smaller than the width of a human hair. These fine sediments enter the lake from roadways and urban areas. Rather than falling to the bottom of the lake, fine sediments remain suspended in the water column, making the near shore areas appear murky and brown. [Read more](#).

How was the lake formed?

The lake was formed through faulting of the Earth's crust, volcanism and glaciation.

About 25 million years ago the Sierra Nevada block was formed by tremendous uplifting. The valley that later became the Tahoe Basin sank between two parallel faults as the mountains on either side rose. Water filled this Basin where Lake Tahoe lies today.

Lava flowing from Mt. Pluto on the north shore formed a barrier or dam across the basin's outlet. Water from rivers and streams flowed into the Basin gradually filling it several hundred feet above its present level.

During the last Ice Age, less than a million years ago, huge ice blocks or glaciers formed in the surrounding mountains. These glaciers scoured the landscape, carving broad U-shaped valleys now occupied by Cascade Lake, Fallen Leaf Lake, and Emerald Bay. The material left after the glaciers melted, called moraines, blocked the original outlet of Lake Tahoe, changing it to the present Truckee River outlet at Tahoe City.

Where does the water go?

There are 63 streams that flow into Lake Tahoe and only one, the Truckee River, that flows out into Pyramid Lake. Unlike most bodies of water in North America, Tahoe's water never reaches the ocean.

How much water is in the lake?

The water in Lake Tahoe could cover a flat area the size of California to a depth of 14 inches. This is enough to supply everyone in the United States with 50 gallons of water per day for 5

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years. And believe it or not, the amount of water that evaporates from the surface of Lake Tahoe every year could supply a city the size of Los Angeles for 5 years.

How cold is the water?

Waters are so cold in Lake Tahoe, staying a constant 39 degrees Fahrenheit below 600 feet. However, shallow areas around the lake can warm up to 60 degrees Fahrenheit during the summer months.

Does it ever freeze over?

The Lake Tahoe Basin has its share of below-freezing days and nights, but surprisingly enough the Lake itself has never frozen over. On occasion, Emerald Bay has been covered with a layer of ice, and ice also forms in cold protected inlets. However, Lake Tahoe's great depth and volume of water is always in motion and keeps it from being the world's largest ice rink.

How large is the lake?

Lake Tahoe is 22 miles long, 12 miles wide, and has 75 miles of shoreline. The surface area covers 191 square miles. Lake Tahoe's greatest depth of 1,645 feet makes it the third deepest lake in North America and the tenth deepest in the world. Crater Lake in Oregon is 1,930 feet deep and Great Slave Lake in Canada is 2,010 feet deep. The bottom of the Lake is 92 feet below the level of Carson City, Nevada.

What is the elevation?

Lake Tahoe's average surface elevation is 6,225 feet above sea level, making it the highest lake of its size in the United States. Its exact elevation, controlled by a dam at Tahoe City, depends on how much water flows in from the mountains and how much is let out into the Truckee River.

History

For many thousands of years, Lake Tahoe was occupied only by Native American tribes. Artifacts confirm the presence of the Washoe Tribe of Native Americans at Lake Tahoe over 10,000 years ago. Native Americans camped, hunted, and fished at Lake Tahoe in relative seclusion until General John C. Fremont's exploration party "discovered" the lake in 1844.

For many years following Tahoe's discovery the area was virtually ignored. In 1859 however, the Comstock Lode was discovered in Virginia City, Nevada. During the 1860s Tahoe became the center of a lively commerce involving the silver mines in Virginia City and the Central Pacific Railroad (which was pushing over the Sierra toward the town of Truckee). The Comstock era resulted in large-scale deforestation of the Tahoe Basin, as timber was required to build mine shafts and support growing developments. It is estimated that over 80 percent of the Basin's forests were clear cut during this time.

Since then, public appreciation of Lake Tahoe and its natural resources has grown. During the 1912, 1913, and 1918 congressional sessions, conservationists made efforts to designate the Tahoe Basin as a national park but they were unsuccessful. Development pressures escalated again in the 1940s and 1950s, and a group of residents and visitors who were concerned about the environmental health of the region formed the League to Save Lake Tahoe.

Gone Fishin' Traveling Camp
Multi-day Camp

Appendix

Activity Name – Create a sand fish

Materials:

Sand
Water
Buckets
Carving tools
Shovel

Procedure: Create a fish that would have all the necessary attributes to survive in Lake Tahoe or Northern Nevada. Use sand and anything else around you such as twigs, rocks, and anything else found on the Tahoe beach for details.

Once you have outlined your fish, begin building! At the end of your build you will need to present to the group the name of your fish, its attributes it has to survive in its environment, what it eats, how big it gets, how long it lives, and any other important information.

Build your fish as big as you can to show detail and to allow everyone in your group to help.

Resources:



Gone Fishin' Traveling Camp
Multi-day Camp
Appendix



Activity Name – Time:

Materials:

Procedure:

Resources: