



Summer Newsletter 2013

President's Message

With each passing summer it is always interesting to see how the lake fishes and receive feedback on how and maybe why things should change relative to the management of the fishery. Some fishermen have questioned whether or not the number of Yellowstone Cutthroat trout planted in the lake each year should be reduced. The IDFG has provided us with factual evidence that the size of the cutthroat trout in the lake has been declining and that they attribute it to the competition for food. Is it possible that there are other factors that may be at play here? Sure, there certainly could be, but is there any factual evidence that supports a counter argument to continuing plant 1.2 million fingerlings and still expect the relative weight and size of the cutthroat trout to increase? If there is I haven't seen it. Now I am not saying that we ignore the empirical evidence of all our veteran angling members, that would be silly, after all they have fished this lake for decades throughout each summer. Yes, they agree that there are fewer big fish but they don't agree that it is a food source issue with too many trout competing for food.

Clearly the gill net data, as listed in Dan Garren's article, has shown a greater number of trout per net night over the last 4 years than the historical norm. I believe, as does Dan and the IDFG, that this is due to an increase in natural reproduction of the Yellowstone Cutthroat trout. My empirical evidence also supports this since it is rare that I catch or even talk to someone who catches a fin clipped fish. Remember that the IDFG only fin clips 10% of the adipose fins for the stocked YCT so in theory one out of every ten you catch should be finned clipped unless there is a significant contribution from natural reproduction. So for me it makes sense to reduce the number of planted fish to compensate for the increase in natural reproduction.

Does this end the debate, not entirely. The water and habitat conditions in the fishery change, even year to year. A big concern I have is the incredible abundance of minnows this year. My wife Kate and I saw a giant school of 3-4" brown minnows that moved like a school of fish in the ocean. We first thought it was a weed bank and then it moved! Later in talking with HLF Director Ed Given, he said it was probably Utah Chubs because they also have that brown color. On another occasion, our marina at Pintail Point was loaded with 1-2" minnows, covering it end-to-end. I have never seen anything close to this many minnows in all my years of being at the lake. Could this cause some of the competition for food, maybe but only time will tell.

Irrespective of the fish plant count debate, the project work of the foundation is just as strong as ever. The HLF Board has been very aggressive approving project expenditures of over \$20,000 in this year alone. All of these projects are focused on improving the spawning and riparian habitat of the Yellowstone Cutthroat trout. It is only through your generosity that allows us to continue so thank you and we look forward to your ongoing support.

Lorraine Snipper resigned from the foundation after many years of service as a director and last year as the Secretary/Treasurer. I want to thank her for her service, she will be certainly missed. Lorraine's husband Steve remains on the HLF Board. Anna Anderson has been hired to take on the secretary/treasurer responsibilities for the foundation so although we lose the moniker of a completely volunteer organization it avoids any dependence on a director to fill the somewhat time consuming role.

I hope you enjoy the newsletter. Thank you again for your support.

Phil Barker
President, Henrys Lake Foundation
web@henryslakefoundation.com

Projects Report

Duck Creek Restoration

A large scale riparian restoration project was initiated on Duck Creek and Kelly Spring Creek back in 2007. This project involved installing electrified fence to protect the riparian area of Duck Creek and Kelly Spring Creek on the Debbie Empey/ Johnson Property. For the past 5 years, much of the riparian area has reestablished natural vegetation and had stabilized, reducing the sediment load in the stream. There are however, several bends in the stream that have been degraded that have not repaired themselves. These areas were heavily impacted by cattle in the past and have become steep with exposed soil that is continuing to erode. The creek has disconnected with the natural floodplain in these areas and is continuing to cut into the bank.

IDFG engineers will evaluate each bank and restore them to a properly functioning bend. The techniques that would be used but not limited to include: grading the bank in order to allow the stream to connect with the floodplain, large willow clumps to stabilize the bank, use of sediment stabilization tools and terraced vegetation techniques, and planting native plants where possible. By repairing the stream, the sediment loading in Duck Creek would be reduced as well as improve habitat for Yellowstone Cutthroat Trout.

Howard Creek Diversion Screen Replacements

The existing two fish screens on the diversion ditches off of lower Howard Creek are over 20 years old and no longer operating properly. The fish screens prevent the entrainment of Yellowstone Cutthroat trout fry, fingerlings, and adults that spawn and rear in the creek from being diverted into the irrigation ditch and not reaching Henrys Lake. Currently, water is not properly passing through the screens, and fish are passing the screens into the ditches. The current two fish screens would be removed and replaced with a new modular fish screen designed by the Idaho Fish and Game screen shop. The purpose of the fish screens are to allow water down the diversion ditches, but prevent fish from entering the ditches, where they would die. The screens will allow successful migration of adult, juvenile, and fry.

Idaho Fish and Game currently monitors the existing fish screens and will continue to maintain and monitor the new fish screens. The screens are checked twice a week in order to make sure they are deterring Yellowstone cutthroat trout from entering the irrigation ditch and supplying the water needed to the irrigation ditches.



A section of Duck Creek on the Empey property to be restored. Debbie Empey has also agreed to stop cattle grazing in this section for at least the next 3-4 years until the stream side vegetation and stream bank have been restored. After that limited grazing may occur.



The last two old wooden diversion screens on Howard Creek at the pond just above the fish ladder that will be replaced this fall with the new modular steel screens.

Timber Creek Water Gap Improvement

A riparian fence was installed on Timber Creek upstream of Henrys Lake Road in order to provide protection to the streambank and provide an opportunity for the riparian area to reestablish natural vegetation by preventing cattle grazing. A water gap was installed in the protected pasture in order to allow cattle to get water. The current water gap is in poor condition and providing an artificial sediment source to the stream. We would like to improve the water gap by installing large rock material at the water/gap interface. The gap will be filled in with cobble, filter fabric, and then topped with fine materials. This will allow water to filter through the soil and prevent sluffing of fine surface material into the stream. The site will also be graded back to provide a smaller slope to the water.



Water gap on Timber Creek on the Hunt property

Targhee Creek Fish Barrier Repair Project

NRCS helped the Diamond D Ranch install two diversions with fish passage on Targhee Creek. The upper one is immediately downstream of the highway crossing and heads west. The middle diversion comes out above the Crystal Bros old rodeo grounds and heads south. The fish passage structure on the second diversion washed out during the 2011 high water event causing an artificial barrier in Targhee Creek. The purpose of this project is to repair the rock drop structure for fish passage in Targhee Creek. This will allow passage for Yellowstone Cutthroat trout in Targhee Creek as well as spawning Yellowstone Cutthroat trout from Henrys Lake. Project construction is being planned for the summer/fall of 2013 and is projected to take a couple days to complete.



Poorly functioning culverts on Kelly Spring Creek

Future Project—Kelly Spring Creek Restoration

The lower section of Kelly Spring Creek has significant silt and no shade along the stream bank. In addition, the culverts under the Taft/Walker access road need to be lowered. HLF is working with the IDFG and other potential partners to evaluate a course of action to restore the lower section to improve both spawning and rearing habitat for Yellowstone Cutthroat trout.

IDFG Report

By Jessica Buelow, IDFG Regional Fisheries Biologist

Pelican Study

Last year, the Henrys Lake Foundation helped IDFG fund a pelican study by purchasing 15 game trail cameras and associated supplies to monitor pelican use of tributary streams and Staley's spring. The goals of this program are to determine peak use of tributaries by pelicans to get a preliminary idea of the potential impacts pelicans may have on congregations of trout. We looked at the timing of pelican activity to determine what areas had the highest pelican activity and when the activity occurred. Cameras were set to take one photo per hour, and all cameras took a photo at the same time to avoid counting one pelican on multiple cameras, which would overly inflate use estimates. Each photo was evaluated and the number of pelicans counted per hour. It's important to note that these counts are not equivalent to the total number of pelicans, as many pelicans remain in view for several hours at a time. Additionally, not all pelicans are actively feeding when recorded on the cameras. The numbers listed below are the total pelican hours at each camera, the actual number of birds would be much smaller than this value.

In 2012, we found the highest pelican activity occurred during the month of May (11,000 pelican hours) and the highest concentration of birds were found at Wild Rose(6008 pelican hours), Howard Creek (2415 pelican hours), and Timber Creek (1815 pelican hours). This is likely due to high numbers of Yellowstone Cutthroat trout concentrating in these areas for spawning. The other tribu-

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taries did not see large numbers of birds during the spawning run. The next month with the highest pelican activity was August (1428 pelican hours) with Staley's spring (530 pelican hours) and Duck Creek (508 pelican hours) with the highest numbers. Timber Creek had several cameras installed to document how far up the tributary pelicans were concentrating. We found that the majority of the birds were found around the mouth and though birds were found higher in the tributary, the numbers were not very large. Pelicans were counted at all hours of the day, but the highest number of birds counted was in the late afternoon.

We repeated the study again this year starting in May and will run the cameras until September. We will be counting the number of pelicans observed, but we will also look at the number of birds that are swimming (assumed to be actively feeding) vs. the number of birds that are loafing (not feeding) in the photos. The cameras give a good idea of the pelican activity around the mouth of the tributaries, but we cannot determine the number of birds on the lake during a given month based on the photos alone. This year, in addition to the cameras, we are doing pelican counts 6-10 times a month in order to get a better idea of pelican use per month on the entire lake.

We are also interested in determining how many fish are being consumed by pelicans. To address this, we tagged 500 Yellowstone Cutthroat trout this past spring to attempt to determine the percentage of fish the pelicans may be consuming. We implanted trout with a microchip (PIT tag) that can be recovered from pelican loafing areas and nesting colonies. Based on the rate of returns, we can get an idea of the magnitude of pelican predation on our trout. We also fed 100 tagged chubs to pelicans. We will begin searching for the tags at nesting colonies around the state and local loafing areas starting in October. Data resulting from this project will give us an idea of whether or not the birds using Henrys are from a local nesting colony or are non-breeding juveniles and how far they are traveling.

In 2012 a nesting colony was found on Island Park Reservoir and was the first documented nesting colony in the Upper Snake Region. This year the colony returned, with many more nests than the year before. Although approximately 250 nests were instigated, no fledglings were produced. Reasons for the nest failure are not clear at this time. The current number of pelicans on Island Park Reservoir is similar to Henrys Lake at about 100.

Spring Egg Take

The spawn take this year went very well with Yellowstone Cutthroat trout first ascending the ladder in February. Sufficient numbers of fish came up the ladder this year in order to meet our egg quota and trap nets were not necessary. We collected 3,360 YCT by April 11th and met the number of eggs needed for the season. A gate was installed in the fish ladder after this date to prevent additional fish from entering the ladder.

Fall Fish Planting

In late September, we will be stocking 750,000 Yellowstone Cutthroat trout and 200,000 hybrid trout in Henrys Lake at the hatchery, Henrys Lake State Park, and at Frome County Park. The stocking has been moved to late September in order to allow the water temperature to cool. This year Ashton Fish Hatchery had difficulties with water supply, which impacted our brook trout fry. As a result, we stocked 40,000 3 inch sterile Brook trout in Staley's spring in July. We will also stock 80,000 5-6 inch brook trout in the lake at the end of September.

Creel Survey including ice fishing

This year a creel survey is being conducted on Henrys Lake and Island Park Reservoir. The survey started on Memorial weekend and will run until the season closes on Jan 1. We will be compiling the data throughout the winter, and will have results next spring. Preliminary results show that the fishing on Henrys Lake has been very good, but the size of the fish is smaller than previous years. This is a similar pattern that we have been seeing in our gill netting data. Refer to Dan Garren's report in this newsletter for more information on the mechanisms for why fish are smaller now than in the past. Island Park Reservoir has been fishing very well this year, with plenty of 16-19 inch rainbow trout being caught. Kokanee numbers and size in Island Park Reservoir are also strong.

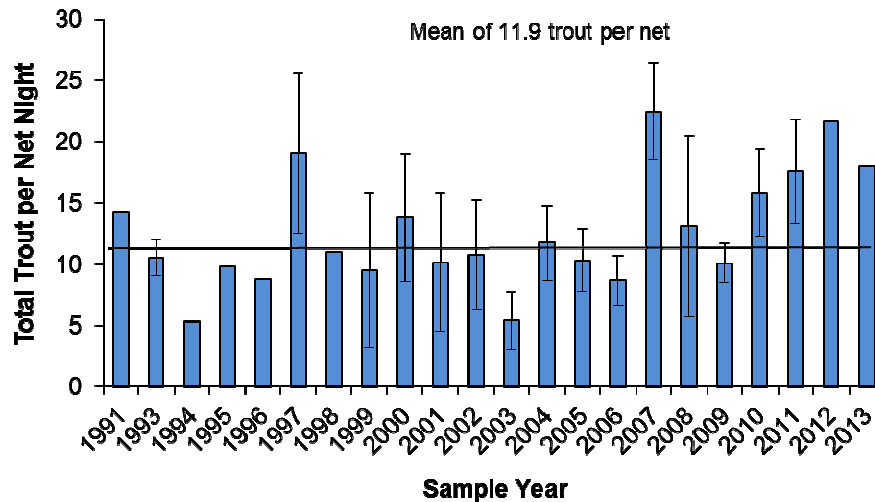
Henry's Lake, 2013 Status Update

By Dan Garren, IDFG Regional Fisheries Manager
 Phone: 208-525-7290 Email: dan.garren@idfg.idaho.gov



**Preserve, protect,
 Perpetuate and
 manage.**

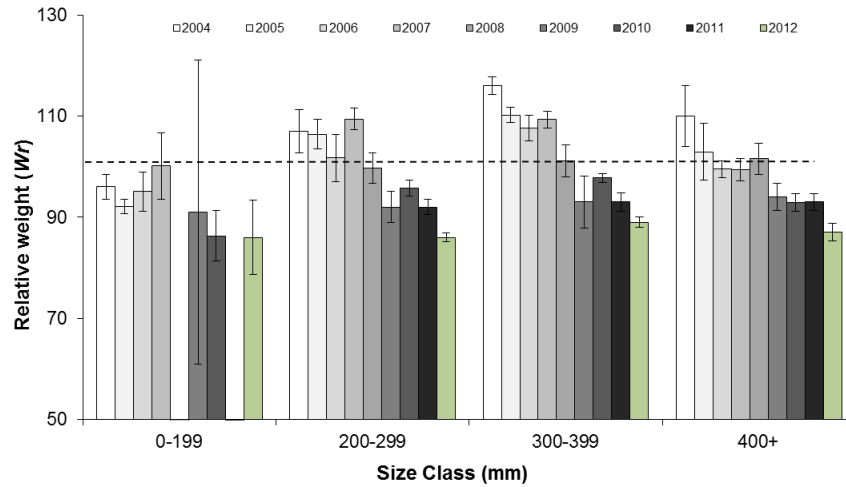
We monitor our fish populations each year with gill nets set after ice-off and before the opening of the fishing season. Although we do not get an estimate of the total number of fish in the lake, we are able to closely monitor trends in abundance. When fish densities in our nets are high, we can safely assume the number of the fish in the lake has increased. Similarly, when the catch of fish in our nets is low, the population in the lake is lower. Results from 2013 are shown in the figure below:



Gill net catch for all trout was 45% higher than average, suggesting that the trout population is well above our long-term average, similar to results from the past four years. The bulk of this increase is supported by cutthroat trout (nearly 45% more cutthroat than normal) and brook trout (twice as many brook trout as normal). Although not above normal, hybrid trout abundance has increased when compared to recent years, and is now back where we expect to see it. The 2013 gill net survey showed a trout population that met our management size goals for all species except cutthroat trout (see below). Much of the increase in trout numbers can be attributed to the numerous habitat restoration projects, fish screens and tributary reconnecting projects that have been completed around the lake combined with better environmental conditions that have led to an increase in wild fish production.

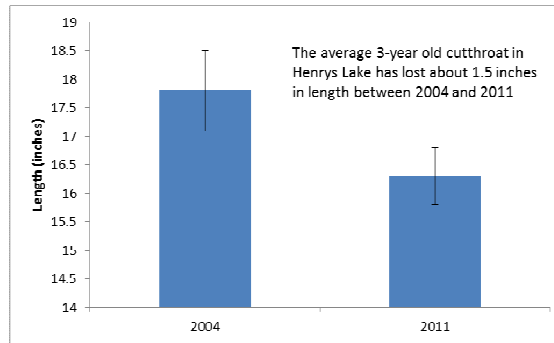
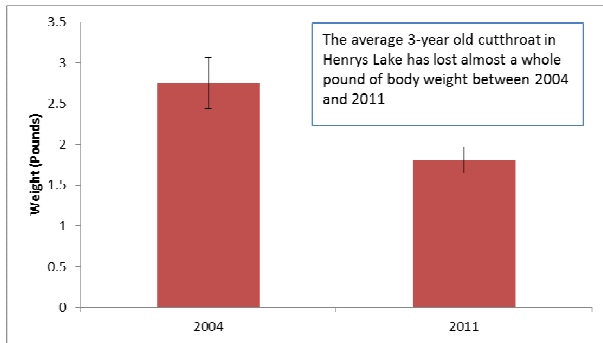
Species	Number caught	Average length	Size Target % > 17" (BKT) or 20" (YCT and HYB)	
			Goal	Actual
Yellowstone cutthroat trout	477	14"	10% > 20"	2% > 20"
Brook trout	250	15.5"	5% > 17"	42% > 17"
Hybrid trout	169	17"	20% > 20"	24% > 20"

While more trout initially seem to be a good thing for anglers, we've seen a decrease in growth resulting from all the additional fish competing for food. We monitor trout growth by calculating "relative weights" which are a measure of the "fatness" of a fish, which is tied to food availability. More available food typically means fatter fish. As the trout population has increased, we have seen this metric decline steadily (see below).



This translates into smaller trout than what we've seen in the past. For instance, a 3-year old trout in 2004 had an average length of almost 18" and weighed 2.75 pounds. In 2011, the same 3-year old trout was 16.3" and weighed 1.8 pounds (see figures below).

To rectify this decrease in growth, IDFG has reduced the number of fish we stock, and will continue to do so for the foreseeable future. We normally stock 1.3 million fingerling cutthroat, 200,000 brook trout and 100,000 hybrid trout each year. Based on our estimates of wild trout production, we have reduced the number of cutthroat by 500,000 fish, but have kept the number of brook trout and hybrids the same as always. We hope that by reducing our stocking of cutthroat by half a million fish, we can account for the natural reproduction and increase the size of trout.



Fishing Report

By Ron Slocum

This year's report is going to cover a mixed bag of subjects—some items are very positive and some subjects raise a reason for concern and research! Generally several of us agree that fishing success has been very mixed and inconsistent so far this year. Here are some thoughts for the year so far!

Size of Fish

Definitely down on average (except brook trout) our mainstay fish—Yellowstone Cutt has been good in numbers but definitely down in size. Hybrids—Phil and I have released 500-700 fish between us with only 3 hybrids over 5 lbs—the worst big fish year in memory! Brook trout—My best year ever! For size and numbers—lots of 2 1/4 to 4 lb brook trout with the average condition of the fish outstanding!

Lake Location

Duck Creek good early in 11-14 feet of water but again lots of smaller fish 13-15". But very few July shallow fish! Targhee—Very good in early July for big brooks and lots of modest size cutts. Staley Springs—some good days but in general—very poor. Howard— Very very good early July and still provides good numbers and more brook trout than any time in history!

Areas of Concern

This first area is a personal observation and not validated—the food source in the lake is changing. Scuds—I can't find any! I'm finding fewer than anytime in the last 20 years! Damsels—are continuing their comeback but still up to 10 years ago. Mayflies—better than 2 years ago but still very modest. Caddis—Okay but down from 2-3 years ago. Minnows—Significantly up! Could this be why the condition and size of the brook trout is so good?

Danger?

The lake is now down 3 1/2 to 4 feet and still dropping. The chance of a winter kill has been increased significantly!

Natural Reproduction

Appears to have increased significantly for our cutthroat! Their reproduction together with the sizeable plants by the F&G of brooks and hybrids should provide for good fishing in Henry's future years.

Fall Fishing

Good numbers of fish and less water and no boat ramps—who knows—lets all fish and find out!



One of the nicer fish from July, caught on a damsel pattern. (Photos by Phil Barker)

LOUIS TRAGER MEMORIAL SERVICE AWARD

In memory of Louis Trager whose life and deeds of stewardship exemplified a commitment of time and service in selfless dedication to the preservation and enhancement of the natural habitat of the Henrys Lake Watershed.



***The Louis Trager Award for 2013 is proudly presented
by the Henrys Lake Foundation to Ron and Penny Zega***

Over the last 8 years, Ron and Penny have been invaluable to the Foundation. Their work effort has been nothing short of amazing. Our annual membership dinner and fund raisers would not have been successful without them. They were integral to all aspects of the events, coordinating the efforts of our volunteers, ensuring a great time for our members and driving increased net proceeds.

As Secretary Treasurer for 4 years, Penny raised the bar for accountability, responsibility and attention to detail across all aspects of our organization. As Projects Director for 3 years, Ron spearheaded our habitat improvement projects for the Yellowstone Cutthroat Trout, witnessed by the increased natural reproduction year-over-year.

As a completely volunteer organization, we are reliant on incredible individuals like Ron and Penny who rise to the occasion and contribute their time and effort thanklessly. Their passion, motivation and years of service to the Foundation have made us stronger and better. We are forever indebted to them for their service.

2013 HLF Dinner on July 12th Dinner at Historic Dining Hall

It was a very fun event albeit with fewer attendees but nonetheless everything turned out well financially and we met our target to fund our highest project funding priorities.

The tables were wonderfully decorated with center pieces generously donated by Melody and John Taft. The wine bar was stocked with Kenwood wines also donated by Melody and John. Near the bar was the HLF projects board showing all the projects that the foundation has sponsored for 2013 and 2014 so that everyone could see where are project dollars are being spent.

The evening started with a wonderful casting demonstration by Bob Jacklin at the casting ponds in back of the historic dining hall. Not many people know it but Bob has individually maintained the casting ponds for the last 29 years. The ponds look practically brand new. Bob has taught his tips and techniques at all the popular sportsman's shows so it was quite a treat for those who participated.

The bidding on the raffle and silent auction items was excellent with everyone's generosity showing through. There was quite a broad range of items with something for everyone. It was fun to see everyone hovering near their preferred items so that they could ensure a winning bid. Highlight items included a gorgeous custom made necklace by Christina Armond and boxes of custom tied flies by Bill Schiess, Ed Given, David Reese, Mike Smith, Jim Ferris and Harry Tupper.

Dinner got started a bit late and then lasted a little longer than planned. Our pasta bar and baked potato idea didn't exactly go according to plan. The queue at the pasta bar was lengthened by the individual preparation of each dish with the ingredients of your choosing but in the end everyone had a great meal and seemed happy waiting.

The live auction had some great items, one of which was a one-week trip for 4 people to Antigua. Other great items included the behind the scenes tour at the Grizzly and Wolf Discovery center, special wines, popular float trips, and artwork by great local artists John Okulick, John Layshock, John Juracek and Ken Takata.

Music by Kennedy and the Assassins was enjoyed after dinner.

Thank You to our 2013 HLF Dinner Event Donors

Anna Anderson	Food Roundup, Inc.	Butch and Dana Oldenkamp
Anglers - Boise's Full Service Orvis Dealer	Ed and Margaret Given	Playmill Theater
Christina Armond	Grizzly and Wolf Discovery Center	Radio Shack
Arrick's Fly Shop	Grizzly Bar and Grill	David Reese
Bar-N-Ranch	Henry's Fork Anglers	Denny Rickards
Phil and Kate Barker	High Country Hair & Nail Salon	RIO Products
Blue Ribbon Flies	Barbara and Al Hobson	Ron Slocum
Body & Soul Massage Therapy	Richard & Lynne Hodge	Mike Smith
The Book Peddler	Homeroom	Lorraine Snipper
Campfire Lodge Resort	Idaho Irrestibles	Melody Taft
Michael & Donna Coles	Island Park Adventures	Ken Takata
Doug Cornett	Jacklin's Fly Shop	Trout Hunter
Don Dixon	John Juracek	Harry Tupper
Drift Lodge	John Layshock	Uptown Salon
Eagle Ridge Resort	Bud Lilly's	Michael & Patty Weigand
Elk Creek Station	Diane & Steve Love	Westmart
Elk Mountain Photo	Roger Mabry	Wild Rose Resort
Espresso West	Mack's Inn	Michael Wilson
Kirk Ewart	Madison River Outfitters	Yellowstone Winterization
Jim and Red Ferris	Mountain Market & Deli	Ron Zega
	John Okulick	

2014 Foundation Dinner Event at Lakeview, MT on Saturday August 9th

For the next event the board has decided to really mix it up and have the annual dinner at Lakeview, MT. Lakeview is located about 30 miles directly west of Henrys Lake on Red Rock Road. It is historically significant in that it was the midway stop on the stage-coach run from Monida to West Yellowstone. John and Melody Taft have generously donated the use of the banquet and catering facilities at this wonderful location. It should be a really fun event.

The menu has not yet been set but we are planning for a very elegant evening with fine foods and wine. There will also be a piano player. As such this will be a reservations-only event with a more expensive ticket price. There will only be a live auction and limited to 5 items of higher value. Traditional auction items such as the HLF Signature Fly Rod and HLF Belt Buckle will of course be included.

The board has also decided to hold the event later in the summer and avoid the 4th of July holiday weekend. It seems as though many members and potential attendees have families visiting during that time, limiting potential attendance. We are planning on holding the event on Saturday August 9th with a start at 4:30 PM.

There is also an option to stay over at Lakeview in beautiful little cabins that are wonderfully decorated. This will be charged separately from the dinner. Given the limited number of cabins and lodging facilities please get your reservations in early.

Annual Election

Officers of the Henrys Lake Foundation are elected annually. Officers also serve as directors. Please vote your approval with a checkmark on the line next to the officer's name on the included ballot card. New for 2013 is the hiring of Anna Anderson to serve as our Secretary/Treasurer so it is no longer necessary to vote on that officer position. Anna is a long-time resident of West Yellowstone MT. In addition to her career in the US Forest Service she also teaches pilates.

Existing directors are re-elected upon expiration of their 2- or 3-year term. New directors are nominated and vetted by the Board prior to each election.

2013 Winter Donor Honor Roll

Donations \$500+

Dirk & Margaret Olson

Donations \$200+

Rodger & Jonnie Camping

Robert, Corey, Linda & Scott Hayden

Scott & Sara Nelson

Ford & Snaque Rollo

John & Melody Taft

Donations \$100+

Daughters of Utah Pioneers

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Phillip Burleigh

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David & Patti Harwell

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Melody Taft

web@henryslakefoundation.com

PO Box 1389, West Yellowstone, MT 59758 Phone: 925-699-0618

Enhancing and protecting the fishery of Henrys Lake