

Summer Newsletter 2012

President's Message

This newsletter marks a turning point in the Henrys Lake Foundation's history. For the first time in the history of the lake, the annual planting of Yellowstone Cutthroat fry will be reduced due to the significant increase in natural reproduction. I think we can all take great pride and accomplishment in what we have collectively been doing for over 30 years—enhancing and protecting the fishery of Henrys Lake. It is through these efforts that the natural reproduction of the Yellowstone Cutthroat has been dramatically enhanced. As you can read in Dan Garren's article, the IDFG will significantly reduce the planting of hatchery-raised Yellowstone Cutthroat in order to increase the average size of the fish while maintaining targeted catch rates.

But we are not going to rest on this recent success. Already this year we are pushing forward with the replacement of an old concrete diversion on Targhee Creek on the Cole property. In early spring, we initiated a project to study the impact of pelicans on the spawning cutthroat in all the key tributaries. Starting next year we want to establish wash stations for waders, float tubes and kick boats so that they are disinfected, avoiding the introduction of invasive species into the lake. You can read more about these efforts and more in the articles from our Projects Director, Ron Zega and IDFG Regional Fisheries Biologist, Jessica Buelow.

The IDFG will post the new Fisheries Management Plan on their website on August 1st. It is important that all members read the plan and offer feedback on any item of concern that pertains to Henrys Lake. As of the publication of this newsletter, we have not yet seen the plan but we are optimistic that the IDFG has included our input (as listed in more detail in the Fall 2011 newsletter). I know many of us were greatly disappointed when the IDFG extended the ice fishing season, and I don't expect any changes vis-a-vis the plan, but from what I have been told and seen in the video created by Dan Garren, the overall impact to the trophy fish population may not have been adversely impacted to the extent we thought likely. But as many of us would agree, it would have been nice to see this trophy fishery given a rest in the off-season.

Our July 5th fund raising picnic was a great success. A big thank you goes out to all our volunteers and directors who made this happen. We had over 100 silent auction items, 4 great raffle items and 15 live auction items. The generosity of those who bid allowed us to exceed our fund raising goal. I would also like to thank all those donors, both local businesses and foundation members, for their donations and support. Many people who attend these events look forward to buying the signature HLF fly rod or belt buckle, custom-tied flies, homemade chocolates and other items that have become our trademark. We are already working on next year's event!

Our efforts to thwart the introduction of invasive species in the lake are never ending. Our thanks go out to Bryce Fowler and his team from Fremont County Weed Control who operate the boat inspection stations. Year after year, the threats are getting closer and closer to us. We all need to do our part and make sure our boats, float tubes and waders are thoroughly washed and dried when moving between the lakes and rivers throughout this incredibly rich fishing environment. Yes, the inspection stations help, but we can't rely on them to catch everything. It is incumbent upon us all to set the example for others while raising awareness of these threats among our fellow anglers, so that everyone takes part in preventing the transport of invasive species.

In closing, I would like to personally thank Ron Slocum and Don Barksdale for their service on our Board of Directors. They both have elected to retire. Ron was instrumental in rebuilding the foundation when it was almost lost back in the early 2000's. He has provided incredible support and guidance since I took over as president in 2008. He will be truly missed. Don has not been at the lake this year due to health issues and requested that a new candidate be recruited in his stead. We wish Don a speedy recovery. But as we bid Ron and Don adieu I would like to welcome back Ed Given who has graciously agreed to rejoin the board after a long absence. Welcome back Ed!

Thank you for your ongoing support.

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

Projects Report

By Ron Zega, Director

Pelican Study

Over the past several years, the pelican population at Henrys Lake has exploded from a handful of birds a decade ago to several hundred or more today. While the lake's healthy trout population is not substantially impacted by pelican foraging, the targeting of spawning YCT in spring at the mouths of Targhee, Howard, and Timber Creeks is undoubtedly having a meaningful negative impact on natural reproduction in these streams. As a starting point in developing future strategies to protect spawning cutthroat during spring, IDFG must first develop baseline data regarding pelican population growth, migratory patterns, and foraging habits. To assist in this effort, the foundation fully funded the \$2,000 purchase of 15 remote digital game cameras to monitor pelican activity and populations. These cameras were installed this spring by Jessica Buelow of IDFG at the mouths of Targhee (2). Howard (1), Duck (1), Timber (8), Wild Rose (1), Hatchery (1), and Pittsburgh (1) Creeks. The data obtained will be collected by IDFG for a minimum of three years for development of potential strategies to mitigate pelican predation on spawning cutthroat.



A large number of pelicans at the mouth of Timber Creek in early spring.

Targhee Fish Screen

Last fall the foundation committed \$10,000 toward the construction and installation of a new modular drum diversion screen on the Cole property on Targhee Creek near the old rodeo grounds. The current screen, which the foundation initially sponsored two decades ago, is an old design now in need of replacement. The new modular replacement screen was designed and manufactured by the IDFG screen shop in Salmon, Idaho last winter and is scheduled for installation this fall during low stream flow conditions. US Fish and Wildlife has provided a matching grant of \$10,000 to this project as well.

Boat Wash Stations

Continuing Fremont County Weed Control's efforts at preventing the introduction of invasive species into Henrys Lake, boat inspection stations were again placed into operation on opening day at the State and County Parks and boat inspection/wash stations were installed at the junction of Henrys Lake Road and Hwy 87 and just south of the Montana state line on Highway 20 This effort has been met with widespread sportsmen approval as the anecdotal evidence regarding the disastrous consequences of invasive species becomes generally known. In order to maintain public support for this effort, the foundation purchased four E-Z Up awnings imprinted with both Fremont County Weed Control and Henrys Lake Foundation. E-Z Ups were installed this spring and present a more professional image to the public regarding this valuable effort.

Wader Wash Stations

Currently, we are discussing with IDFG the installation of Virkon wader/float tube cleaning stations next year at the three Fremont County boat inspection/wash stations at Henrys Lake. Earlier this year a voluntary use Virkon wader station was installed at the Harriman Ranch on the Henrys Fork and is being actively used by anglers. While usage of the Henrys Lake stations would also be

voluntary, we believe the Henrys Lake anglers would support this effort at controlling the introduction of invasive species into the lake.

Future Projects

Other potential projects on our agenda include the possible fencing/rehabilitation of small sections of Timber, Duck and Kelly Creeks where cattle grazing may have had some negative stream impact. Jessica Buelow of the IDFG and I plan to walk the streams this summer to assess their condition and evaluate what actions might be taken to improve their potential for improved YCT natural reproduction.



E-Z UP Canopies and chairs purchased for the boat inspection stations.

IDFG Report

By Jessica Buelow, IDFG Regional Fisheries Biologist

Pelican Study

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. We want to study pelicans in order to monitor pelican abundance trends on the lake and monitor the impacts on Yellowstone Cutthroat trout populations. The cameras give us information on the peak use on the lake, the number of pelicans at each location, location and timing preference for feeding, foraging patterns including night feeding and group feeding, adult vs. non breeding adult ratios, and the ability to compare pelican concentrations between years. The game trail cameras were set at the mouths of tributaries and other important areas upstream. This is the first year of the pelican study with plans to continue monitoring in the following years. The cameras are set to take 1 photo an hour and all of the cameras take a photo at the same time.

Pelicans likely inhabited Idaho before European settlement. In the 1900's Blackfoot Reservoir and Lake Walcott were created, which provided ideal nesting sites (islands) and abundant forage (carp, suckers, and chubs) increasing bird populations. However, Pelican populations nationwide were in decline until the 1980's likely due to organochlorine pesticides and minimal governmental protection. Pelican populations have been increasing in Idaho since the late 1990's (fewer than 100 at Blackfoot, and fewer than 500 at Lake Walcott) to around 2500 pelicans at Blackfoot Reservoir and 4000 at Lake Walcott in 2008. Pelicans feed mainly on forage fish, but are opportunistic feeders and feed on Yellowstone cutthroat trout when concentrations of fish become vulnerable. A breeding adult can eat up to 4 lbs of fish/day.

Preliminary results from the cameras indicate that the highest concentrations of pelicans occur on Henrys Lake during the YCT spawning run with some tributary streams having more birds than others (Timber and Howard Creek having the highest). Pelicans on the lake are feeding nocturnally and using herding behavior. Many of the early season birds tend to be breeding adults.

In June of this year ~ 150 pelican nests were found on Island Park Reservoir. This is the first nesting colony documented in the Upper Snake Region. Abundances of pelicans throughout the region will be continually monitored over the coming years to detect changes in abundance, and to document predation concerns if and when they occur.

The placement of game trail cameras will give us valuable date for following the pelican use on Henrys Lake. I would like to thank the Henrys Lake Foundation for their support in this project.

Wader wash stations

Wader wash disinfection stations have been established this summer at the Ranch in Harriman State Park, Flat Ranch Preserve, and the Logjam, south of Last Chance in order to prevent the spread of aquatic invasive species. The objective of the stations is to have fishermen immerse their boots before fishing, thus providing highly effective protection against the spread of invasive species in the Henrys Fork watershed.

Wader wash stations along with boat wash stations are another attempt to stop aquatic invasive species, including Zebra mussels, Quagga mussels, New Zealand mudsnails, Eurasian watermilfoil and others, from entering the state. The wader wash stations will also help to inform the public about the concerns of aquatic invasive species and techniques to eliminate these threats. With both wader wash and boat inspection stations in the caldera, we can help prevent the spread of aquatic invasive species.

The wader wash stations are using a gear disinfectant called Vircon aquatic, which has proven highly effective in killing many invasive species, including viruses, bacteria, fungi, molds, mussels and Eurasian Watermilfoil. To effectively treat gear, anglers will immerse their wading boots in the solution and use a scrub brush to apply the solution to additional gear (waders, float tubes, etc.). There is no need to disinfect gear again unless you leave the caldera.

By following these easy steps we will continue to stop the spread of invasive species in Idaho. This program is purely voluntary and with your cooperation it will be successful. We are looking for additional funding and support to expand the wader wash stations to the boat wash stations on Henrys Lake in order to provide additional protection from invasive species.

Spring egg take

This was an interesting spring at the fish ladder. Trout started ascending the ladder in early March, but the number of fish that initially entered the ladder were not sufficient to meet egg take quotas. There were many fish however, swimming in front of the ladder so we decided to deploy trap nets to capture the fish and get the eggs needed for a successful spawning season. The nets were very effective and we were able to collect plenty of ripe female Yellowstone Cutthroat trout. We collected 2,920 YCT total for the season

(Continued on page 4)

(Continued from page 3)

with 760 of them collected by nets in the lake. The egg quality was good and egg requests were satisfied. We will be able to meet our 750,000 YCT request, as well as our 200,000 hybrid request. We are not sure why the YCT weren't migrating up the fish ladder, but shortly after meeting our egg take goals, cutthroat began moving up the ladder again. We are hoping to stock fish later in September this coming season when lake temperatures will be cooler, and also possibly stock some fish in the spawn house in order to give them a longer opportunity to imprint. The use of nets gives us an additional tool to capture fish, but it is much more labor intensive and time consuming. The brook trout are growing rapidly and 100,000 will be stocked in September. In June, 10,000 super hybrids were stocked in the lake. These fish were held in the hatchery for an additional 9 months to grow larger and were stocked at 8-10 inches in size.

5 Year Plan and synopsis of current fishing season

The 5 year fish management plan is currently being revised and updated. We've incorporated many of the suggestions Henrys Lake Foundation proposed, and believe the document is stronger as a result of these comments. The document will be available for public input in a couple weeks.

Although the department is not conducting a creel survey this year, indicators point to an excellent season so far. Surface water temperature is rising so the fish are searching for cooler water. Anglers have been reporting good catches of brook trout and large numbers of smaller cutthroat caught this season. Several reports of 6-10 pound hybrids have been reported as well. The coming months should continue to provide outstanding fishing opportunities. The next creel survey will be during the 2013 fishing season.

Prior HLF President Alan Tubbs passes away

Rice Funeral Service, Claremore, OK

Alan went to be with his Lord on Wed., May 30, 2012 at the age of 68.

Alan was born on May 25, 1944 in Los Angeles, Cal. to Edgar and Winifred (Hamilton) Tubbs. He received his education in California, graduating from Monrovian Knights School and continued his education at the University of Southern California. Working on Bachelor's degrees in botany and horticulture, Alan left school when his father's health failed.

Employed as an electrician, Alan worked for Servimation Vending, a Canteen Company from 1964 to 1970 when Oklahoma became home. He worked for Pepsi Cola Vending and then Centrilift before opening his own carpet cleaning business, Pro Champion. Approximately 12 years later he became the owner/operator of Moose Bay Lodge in Island Park, Idaho, Alan's vacation getaway. A hard worker who took great care of his family, his skills and areas of expertise were many and diverse.

was a

On Sept. 10, 1994, Alan and Bonnie Equels Melton married and made their home in Claremore. Alan was a 33rd degree Mason and a member of the Shriners. A love of children prompted his selfless involvement in their service programs. Hobbies included fly fishing, coin collecting and race car driving.

Compassionate, big-hearted and generous, Alan leaves his family with a legacy of service and love. He is survived by his wife, Bonnie, of their home in Claremore; children Mike Tubbs and wife, Melissa of Chelsea, Scott Tubbs and wife, Niki, Toni Bucsok and husband, Randy and Terri Miller, all of Claremore; his grandchildren Phillip Tubbs and Corie, Kayla Goodman and Nathan, Devon Tubbs, Emily Hollingsworth and Alex, Holly Mangrum, Scottie Tubbs, Jenifer Tubbs, Kimberly Mangrum, Tyler Mangrum, Brian Burnett and Tami, Jeanie Lewis and Sam, Candice Purcell and Aaron, and Jerry Nichols, and many beloved great grandchildren who blessed his life. He was preceded in death by his parents and brother, Edwin Tubbs.

Public Comment Period for new IDFG 5-year Fisheries Management Plan

IDFG Regional Fisheries Manager Dan Garren has notified the Henrys Lake Foundation that the new Fisheries Management Plan will be available on the IDFG website August 1st. Public comment is encouraged before the plan is finalized. Once posted the plan can be found at: http://fishandgame.idaho.gov/public/fish/.

You may recall from the HLF Fall Newsletter that we would like to see the following objectives included in the plan:

- 1. Increase the size and number of trophy trout in Henrys Lake; reverse the year-over-year decline in relative weights
- 2. Enhance the natural reproduction of cutthroat trout in Henrys Lake
- 3. Prevent the White Pelican population at Henrys Lake from adversely impacting the natural reproduction of cutthroat trout
- 4. Prevent the Utah Chub population in Henrys Lake from adversely impacting the fishery
- 5. Protect Henrys Lake from the introduction of invasive species
- 6. Implement a long-term strategy to maintain optimal water quality in Henrys Lake
- 7. Increase angler opportunity for children and disabled people at Henrys Lake
- 8. Enforce all federal, state, county and local regulations



Preserve, protect, Perpetuate and manage.

Henrys Lake provides one of the best open water trout fisheries in the State of Idaho. As such, anglers place a high value on the lake, and often ask about fisheries management activities. Recent increases in naturally produced trout have made it necessary for IDFG to reduce our stocking rate for the coming year. I've attempted to outline the rationale for this decision, and to provide information on how IDFG manages Henrys.

Gill Net Surveys

IDFG uses gill nets set each spring to monitor the fish populations in Henrys Lake. Although gill nets cannot tell you how many fish are in the lake, they do provide a relative index of the population. When gill net catch goes up, we can reasonably conclude that the population in the lake has increased. Likewise, when the gill net catch is below average, we conclude the number of trout in Henrys is lower than average. We attempt to set 50 gill nets each season (one gill net set overnight = one net night of effort). Based on prior calculations, we believe that this high level of effort provides enough statistical power to detect changes in our populations over time. Nets are set as soon as the ice comes off (typically in early to mid-May), and we run them as often as possible up to the season opener on Memorial Day weekend. In some years, late ice off and/or poor weather conditions prohibit getting all 50 net nights of effort, but we do our best to meet this goal.

Our long-term average for trout is 11.9 trout per net night (Figure 1, below). As seen below, we have been on an increasing trend in abundance since 2009, and have now reached the all-time highest gill net catch rates since gill netting began in 1991. This suggests that the population is now well above our long term average.

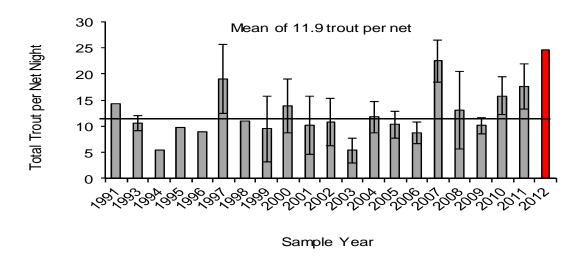


Figure 1. Gill net catch for Henrys Lake, Idaho. Solid line is the long-term average of 11.9 trout per net. Data from 2012 (shown in red) is considered preliminary.

Trout Relative Weight

Another metric we measure is the relative weight, or fatness of trout. This is a calculation that looks at the weight of our trout in relation to their length, and calculates a score for each fish. A score around 100 suggests that fish are healthy, and their body condition is right where it should be and food resources are balanced with the fish population. Scores over 100 indicate an abundance of food resources and "fat" trout, and scores less than 100 suggest a lack of food for the number of fish present and fish tend to be skinnier than they should be. One trend we have been watching is the continual decline in relative weights for Henrys Lake trout. In the early and mid-2000's our trout were exceptionally "fat", with scores well above 100, some as high as 120 or more. Over time, this trend has decreased, and we now reside somewhere around the low 90's (Figure 2). This strongly suggests that there is not enough food available for the number of trout present.

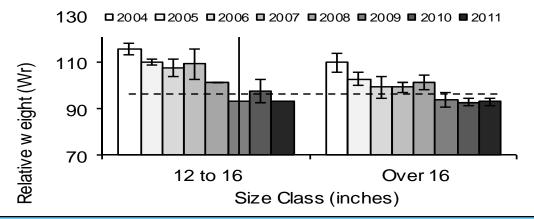


Figure 2. Mean relative weights for trout in Henrys Lake, Idaho by size class.

Diet Studies

We also monitor the stomach contents of trout, and have seen shifts in foraging behavior between the early 2000's and now, with fish making up a larger portion of the trout diet than previously. This shift in foraging behavior suggests that conditions have changed over the past 10 years. We believe this increase in predation is related to the reduction in the amount of food available now compared to 10 years ago. During the mid-2000's when Utah chub abundance was increasing and the potential for competition with trout was a greater concern, we believed that as food became scarce trout would start eating chub, and bring the population back into balance. population back into balance. This appears to be happening to some degree, as fish were more prevalent in our diet studies in 2010 and 2011 as opposed to 2003 + 2004 when the food supply (and relative weight) was better. In summary, in the early 2000's, trout did not eat chubs to any great extent because there was more food (leeches, scuds, chironomids, etc) available. Presently, it appears that food is less abundant due to the increase in the number of trout and now chubs and other fish are a larger component of trout diets.

Utah chub monitoring

As mentioned above, Utah chub abundance started to increase in the mid-2000's. This raised concern for impacts to the trout population, and prompted research into the possible effects of a more abundant chub population. Possible impacts from more abundant chubs include predation on trout, predation on trout eggs and fry, or competition for food or other limited resources. In short, we believe that predation by chubs on trout is unlikely, given that stocked fish are too large to be a food source for chub, and naturally-spawned fish remain in the tributaries for the first portion of their life. Similarly, predation on trout eggs is unlikely given this same separation between chub and trout. The most likely impact is from competition for a limited resource such as food. Our hypothesis has been that as food becomes limited, trout will begin to eat chubs, and bring the population back into balance. Currently, it appears this might be happening, as fish are a larger component of the trout diet, and chub abundance appears to be reduced compared to a few years ago.

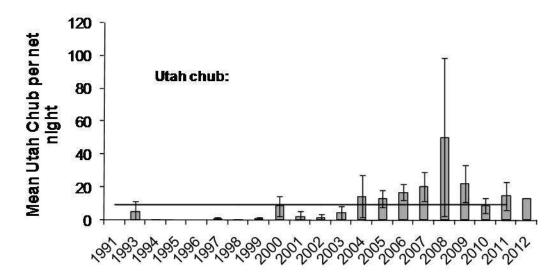


Figure 3. Mean gill net catch of Utah chub in Henrys Lake, Idaho. Data was obtained from spring gill net surveys.

Natural Reproduction

Along with trends in abundance, we also use gill nets to monitor the amount of natural reproduction in the population. Henrys Lake is stocked with approximately 1.3 million fingerling cutthroat trout, 200,000 fingerling hybrid trout (sterile) and 100,000 fingerling brook trout (sterile) annually. Since we assume that the hybrids and brook trout we stock do not reproduce, we concentrate on monitoring cutthroat reproduction, which we know attempt to spawn each year. To do this, we clip the adipose fin off of 10% of the cutthroat we stock annually, or approximately 130,000 fin clipped fish each year. We then monitor of the number of fish with fin clips in our gill net surveys over time. When 10% of the cutthroat captured in our gill nets are ad-clipped, we conclude natural reproduction is low, as the ratio of our net catch is the same as that is stocked. However, when less than 10% of our net caught cutthroat are clipped (meaning more unmarked fish in the population), we can assume that natural reproduction is adding to the population. Prior to 2005, we did not see the fin clip rate drop below 10%. However, in recent years, that clip rate has con been around 6% suggesting that natural reproduction is adding to the population in addition to our stocked fish.

Conclusions

Our monitoring program on Henrys has identified a substantial increase in our gill net catch, a shift in foraging behavior, a reduction in relative weight of cutthroat and increased natural reproduction. Combined, these factors provide substantial evidence that the trout population has increased, which will make it difficult to meet our objectives (catch rate of one fish every 80 minutes or so on average and a desirable size structure with 10% of cutthroat exceeding 20") for the fishery on Henrys. This does not mean we think the population is going to crash – more so, we believe that growth is slowing to the point that meeting our management goals will become difficult if this trend continues. It's likely that we could exceed our catch rate goal, but it will become increasingly difficult to meet our size goals without more food becoming available.

The increased abundance of wild fish is likely the product of the many habitat improvement projects that have occurred on the tributaries where trout spawn. Many agencies and organizations including the Henrys Lake Foundation, IDFG, the US Forest Service, local landowners and many others have worked together to screen irrigation diversions, provide fish passage and limit grazing impacts to our streams with fencing projects. Two recent noteworthy projects include the removal of the bridges on Targhee and Howard creeks that served as migration barriers until 2005. Once completed, these projects opened up miles of habitat upstream that may now likely contribute to wild fish production. In addition to the numerous habitat projects, a return to better snowpack years has certainly helped our fish populations.

To address our concerns for the changes we are observing in Henrys, IDFG has reduced the stocking target for the lake this year. We have used the proportion of fin clipped trout to estimate how many fish (wild and stocked) are likely present in the population. When we have no natural reproduction and the population is supported solely by stocking, we believe there are roughly 500,000 two-year old and older trout in Henrys. Based on a fin clip rate of6%, we believe that natural reproduction is contributing an additional 250,000 trout. We adjusted our stocking request for this year to reflect the impact of these wild fish, and will stock 750,000 cutthroat this year as opposed to the 1.3 million we typically stock. We will continue to evaluate the gill net data and adjust stocking accordingly in the coming years. Although this adjustment will help bring the lake back into balance, it's worth noting that the change will not occur quickly. It's more likely that this will take two to four years to accomplish, depending on how variable natural reproduction is over time.

It's also worth pointing out that although the population appears to be much higher now than typically, that does not necessarily mean catch rates for anglers will automatically go up. Environmental factors such as lake temperature also play a role in catch rates. We've seen high densities of trout before (2007, for example) when environmental conditions were not favorable. Angler catch rates in 2007 were below average, but fishing conditions were poor. That particular season was hot and dry, with not much summer precipitation to keep the lake cool. The following year (2008) was cool and wet, and produced great catch rates for anglers even though our population was closer to what we consider typical. So we really need to have two factors align to produce outstanding catch rates — a good population of fish, and good fishing conditions. This year is shaping up to have at least one of those factors in place. With a little luck, we could see the weather contribute, and produce a very memorable year.

2012 Fishing Report Ron Slocum

What a different year! Dry fly action, smaller fish, early Brook trout trophies, slow at Duck Creek, no fish at Howard. What's next? During the first 10 days of the season there was dry fly action in 3 feet of water on mayflies and at the same time Brown Crystals in 15-16 feet of water resulting in 20 fish days! You would think this was Hebgen Lake with all the mayflies. The food source in Henrys is changing. Damsels are coming back very strong as well as callibaetis mayflies. Caddis are strong, especially at Targhee. How about Staley Springs? Very slow as well as shallow water at both Duck and Howard. In the past 30 days the best flies have been damsel nymphs, pheasant tails and Henrys Lake renegades. The biggest surprise to date are the lack of big hybrids and the smaller size of the cutts and hybrids. Yesterday there were 32 boats at Targhee, 3 at Duck, 0 at Staleys and 1 at Howard! The rest of the year will be very interesting, I still anticipate a good fall fishery—but will we see any more large fish? At this point I have released approximately 380 fish with only 3 over 5 lbs. Every year is interesting at the Big H and despite some disappointments it's still the best in the West!

July 5th Picnic a Great Success

On Thursday, July 5th, the Henrys Lake Foundation held its annual picnic at the historic Union Pacific dining hall in West Yellowstone. Foundation members, friends and visitors enjoyed a BBQ pork lunch, a chance to win raffle prizes, live and silent auction items, fly tying demonstrations and casting instruction from local experts. Proceeds from the event will be used to fund fisheries habitat improvement projects that enhance the natural reproduction of the Yellowstone Cutthroat trout in Henrys Lake.

Guest speakers included IDFG Regional Fisheries Biologist Jessica Buelow who discussed the significant changes in management of the lake and the reduced planting counts of Yellowstone Cutthroat trout. She also discussed the ongoing pelican study and the use of the night-vision cameras to study their feeding habits, along with the installation of a wader wash station at Harriman State Park to thwart the introduction of invasive species. Fremont County Weed Control Manager Bryce Fowler also attended and discussed what his team is doing to stop the introduction of invasive species through the operation of the boat inspection stations.

The highlight of the event was the presentation of the foundation's Louis Trager Memorial Award to US Forest Service Fisheries Biologist Lee Mabey. The award is 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.

Phil Barker, President of the Henrys Lake Foundation, presented the award to Lee and stated "Lee's passion and dedication go far beyond his job responsibilities. As a fisheries biologist for the US Forest Service, his leadership of the project to replace the culverts on Duck Creek and re-route Red Rock Rd to eliminate one of the culverts was exemplary. It was Lee's perseverance over this four-year project working with partner agencies and landowners to resolve critical issues that may have deterred others. The new culverts and rehabilitation of the stream bed have improved fish passage to miles of upstream spawning habitat on Duck Creek, a key tributary of Henrys Lake. The Henrys Lake Foundation is forever indebted to Lee, serving as a perfect example of how stewards of this incredible fishery act in extraordinary ways to protect the Yellowstone Cutthroat trout and its native spawning habitat."



Opportunities and Threats

Lee Mabey: Acting Forest Fisheries Biologist Caribou Targhee National Forest

It was with great pleasure I was once again able to attend the Henry's Lake Foundation Picnic in West Yellowstone. I was honored to receive the Louis Trager Conservation award at the picnic. However of all the projects that have been accomplished to improve the fisheries on Henrys Lake and its tributaries it is safe to say that none have been accomplished by anyone one individual. By working together in a cooperative manner with landowners, agencies, and groups like the Foundation much has been and will yet be accomplished. Thanks to all!

Looking forward as to what is next for the doing; two things come to mind, opportunities and threats. There are opportunities to work with landowners to improve conditions and spawning in some of the tributaries. These opportunities could involve increasing efficiencies in irrigation and consolidating stream flow. However of largest concern to all of us should be the threat of invasive species and their ability to alter the unique shallow productive lake we all know as Henrys. In the last newsletter curly leaf pondweed (CLP) was discussed. CLP is known to occur at McCrea Bridge in Island Park Reservoir and at Hebgen Reservoir. It is also spreading throughout eastern Idaho on the Snake and Portneuf Rivers. In parts of Gem Lake dense surface mats or rafts are forming. In the shallows 3-10 feet CLP could cause changes from difficulty for boats to loss of oxygen as plants die off and decompose in late summer. CLP is spread by boaters transferring pieces of plants as they move from one body of water to another. Please Clean Drain and Dry all gear and get your friends to do the same. The boat wash stations are helping to raise awareness but do not replace the need for attentive users. Invasives are the greatest immediate threat to your Henrys Lake.

Invasive Species Report

By Bryce Fowler, Fremont Country Weed Control

Fremont County Weed Control maintains the following Aquatic Noxious Weed List. The boat inspection stations at Henrys Lake and the Montana border at Targhee pass inspect all watercraft for these.

Eurasian watermilfoil is a submersed perennial plant that has fine feather-like leaves. These leaves are arranged in whorls of four. The leaf generally has 12 or more leaflet pairs (not to be confused with the native plant Northern watermilfoil that has under 12 leaflet pairs). **Eurasian Watermilfoil** forms very dense thick mats of vegetation on the water's surface. This interferes with recreation such as fishing, boating, water skiing and swimming. The dense mats increase the pH of the water and reduce the amount of oxygen in it killing fish and other life. This destroys water quality and creates a breeding ground for mosquitoes. Swimmers have been known to become entangled and drown in these dense thick mats.

Curlyleaf pondweed is another hardy and incredibly invasive submerged aquatic. It has oblong 2-3 inch blue-green leaves that are wavy along the edges, like lasagna. Along the edges of the leaves you will find very small serrated edges. This plant produces small greenish brown pine cone lookalikes called turions. **Curlyleaf pondweed** forms dense mats in the water, which die off to create a great deal of waste in bodies of water. This plant has an extensive and dense root system and can tolerate extreme conditions.

Both **Quagga & Zebra mussels** can wreak havoc when introduced to a new environment by disrupting the natural food chain and crowding out native species. **Quagga & Zebra mussels** can colonize on hulls, engines and steering components of boats, other recreational equipment, and can damage boat motors and restrict cooling. These mussels also attach to aquatic plants, submerged sediment, and surfaces such as piers, pilings, water intakes, and fish screens.

Flowering rush is an aquatic perennial that can reach heights of five feet tall. Stems are erect and triangular. Leaves are also sword-like and triangular and may end with spirals. The root system is extensive and often remains submerged in water. If the plant flowers, the flowers are distinctive in that they are umbrella-shaped and pink and white in color. Each flower has three white to pink petals and flowers bloom from June to August, but will not flower if the plant is located in deep water. Six pods with long beaks develop when mature; each pod contains numerous seeds. Flowering rush reproduces by seed and by root. It is found in the riparian areas including water courses and wetlands such as muddy shores of shallow water, ditches, marshes, lakes, or streams. It grows well in a variety of soil types.

Hydrilla is considered to be the most problematic aquatic weed in the United States. A native of Asia, it was first introduced as an aquarium plant that has become versatile in its habitat. **Hydrilla** can grow in almost any freshwater body including springs, lakes, marshes, ditches, rivers and tidal zones that can range from a few inches to more than 20 feet deep. Because of its tolerance to little or no light, it can begin growing in low-lit areas before other plants can get a chance to start and take hold, thereby outcompeting desirable vegetation at early stages.

Hydrilla grows as a submerged aquatic perennial with slender branched setems that can grow up to 25 feet long. It forms dense stands or subsurface mats that suffocate existing aquatic life as it takes over a waterway.

Brazilian Elodea is an aquatic perennial that can reach lengths of up to six feet. Its slender stems form dense stands or subsurface mats that can clog and suffocate local waterways. Its small white flowers grow with three petals and a bright yellow center. The flowers float at the water surface. The leaves grow in a whorled pattern with four to six leaves that go around the stem.

Brazilian elodea reproduces by floating fragments and nodes which grow into roots. Brazilian elodea is found in shallow, slow-moving waters, lakes and ponds. It was introduced as an aquarium plant.





Annual Election

Officers of the Henrys Lake Foundation are elected annually. Officers also serve as directors. The following officers are listed on the enclosed ballot card. Please vote your approval with a checkmark on the line next to the officer's name.

Officers

Phil Barker, President—retired software company executive, avid fly fisherman and summer resident at Henrys Lake. Phil has served as president since 2008.

John Taft, Vice President—retired real estate developer, avid conservationist and bird watcher and summer resident at Lakeview MT. John has served as vice-president for many years.

Lorraine Snipper, Secretary/Treasurer—retired forensic accountant, avid hiker and photographer and summer resident at Henrys Lake. Lorraine Snipper was a previous treasurer and once again took over the role in the fall of 2011 upon resignation of Penny Zega.

Directors of the Henrys Lake Foundation are elected annually. The following directors are listed on the enclosed ballot card. Please vote your approval with a checkmark on the line next to the director's name. 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.

Directors

Ed Given (Prior director years ago) - outdoor sports writer, avid fly fisherman and summer resident at Hernys Lake. Having been a prior director years ago, Ed brings a wealth of knowledge that we anticipate leveraging on future projects.

Steve Snipper (Current director) - retired bankruptcy attorney, avid fly fisherman and summer resident at Henrys Lake. Steve has been a director for many years, providing us with expert reviews of contracts as well as serving as the foundation's representative on the Henrys Fork Legacy project.

2012 Winter Donor Honor Roll

(Since publication of 2011 Fall Newsletter)

\$200+ Donations

Rodger and Jonnie Camping

Gem State Fly Fishers

Brad and Sone Hermes Parmer and Mary VanFleet

\$100+ Donations

George Lang

Robert Mielbrecht

Butch Oldenkamp

Lon and Mary Ann Rich

John Runft

Other Donations

Eva Barker

Mary Dimke

George J Donovan

Todd Eason

Velora and Jim Ferris

Mike and Nona Gibson

Ed and Margaret Given

Henrys Lake Foundation

Officers

Phil Barker, President John Taft, Vice President Lorraine Snipper Secretary/Treasurer

Directors Velora Ferris Mike Smith Penny Zega

Lynne Hodge Steve Snipper Ron Zega

Richard Hodge Melody Taft

Tom and Becky Schell

Gerald Waller

web@henryslakefoundation.com

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

Enhancing and protecting the fishery of Henrys Lake