

# HENRYS LAKE FOUNDATION NEWSLETTER

Fall, 2007

#### President's Message

The 2007 fishing season at Henrys for many of us was a "mystery year". Ice out was a record one month early occuring the first week in May. The F&G gill netting samples were strong and bode well for the summer with a strong population of all age classes predicted. The extended period of time between ice out and the opener may have helped change the dynamics because the early fishing was only fair. With the onset of warmer weather one could only ask "where did all the fish go to spend their summer"? High water temperatures and excessive weed growth produced very slow fishing for most of June, July, August and much of September. Imediately after Labor Day fish began congregating in the Howard Creek area and for six days there was a fishing bonanza. There must have been a water quality issue (oxygen levels and/or temperature) because after a cooling storm the fish disappeared again until October. Fall fishing picked up considerably and good fishing has continued into November.

On another front, your Foundation has approved 4 joint projects (with F&G) with a total contribution by the Foundation of approximately \$30,000. All four projects should have good long term improvements for the fishery.

In August the Foundation experimented with a new fund raiser-a Patron's Dinner and auction. The dinner organized by Melody Taft was a big success and netted over \$6500 for current and future projects. For the summer of 2008 we plan to expand the annual picnic which will take place at the Henrys Lake State Park on July 5<sup>th</sup>. We will also expand the new Patron's Dinner planned for mid-August. The spring newsletter will give you all the details of the August dinner and auction.

In closing the big H is in need of water! The entire upper Snake River watershed is bone dry! The North Fork Irrigation Company also has a debt of 40,000 acre feet for next year which is nearly half of the Lake at full table. Join us in praying for rain and snow!. Looking forward to seeing you all next spring. Ron Slocum, President

## Not Enough Fish? By Bob Bartsch, Director, HLF

Last spring at a party a guy complained about the fishing on Henrys Lake (HL). He announced that there were too few fish in the lake and that the F&G won't put in the 2 million fingerlings that he feels are needed to produce the type of fishing that HL has been known for over the years.

Just over 4.5 million fish have been released in HL by the F&G over the last 3 years. This year they put in 1.6 million; 104,5489 (6.7%) brookies, 145,700 (9.4%) hybrids and 1,395,600 (84.9%) yellowstone cutts. These fish were in better than average condition when they went into the lake. But, nobody can predict how many of those fish will over winter from the 3-6 inch size when they were stocked to an expected 10-12 inch size that the survivors will be next spring. Last year HL got 25% of the fingerling hatchery production of the State of Idaho. That's one lake! Still it is not the 2 million fish that some would like, but it's averaging 1.5 million. If you look back to the late 1990's and early 2000's the F&G was stocking about 1.2 million per year.



Ted Kellogg and his recent 10 lb hybrid catch.

The F&G biologists use gill net samples as a statistical means of estimating fish populations in many lakes including HL. The idea is that the samples from the same locations at about the same time of year can provide an estimate of population. The nets are strung out in the late afternoon and the next morning the fish caught are counted, measured, aged and samples taken for various studies. Considering the combined data from 51 such gill net nights a clear trend emerged: 2003, 5.4 trout/net; 2005, 10.3 trout/net; and 2007, 21.9 trout/net. This year all age classes of fish, especially the younger ones, were well represented. The upward trend is a clear indication that the lake has significantly recovered from the low water years of earlier in the decade.

The gill net population was 70% cutts, 18% hybrids and 12% brookies this year. Notice from above that these percentages approximate the percentages of the fish stocked this year. Compare results from 2006 (7% brookies, 11% hybrids and 82% cutts) and the match is closer. A good scientist likes this type of correlation in data since it verifies the sampling techniques involved. In other words with the data lining up by different methods it appears that one can say with more certainty that the fish in HL are doing well with an increasing population over the last few years. This brings us face to face with the fact that the early fishing at HL this year was often slow with catch rates of .46 fish per hour for the opener and with an average of .25 fish per hour throughout June. July and August were dismal. Then, September started with a flurry of catching activity; fish congregating at the tributary mouths for 5-6 days. A small fish kill was noticed in the outlet area and it was thought that

we had some minor water quality issues that led to the congregations. The fishing then did not improve again until in October when the weather finally cooled significantly. The creel surveys on HL this fall have been casual involving spot checks of small numbers of anglers, but the rates have been as high as 1.6 fish per hour.

Since no one has reported catching or seeing a HL trout with wings or legs, I think we can conclude that the fish have been in the lake all summer. Our data shows a significant population of fish. Other than the fact that fishing was not great during much of the season, what are the indications that HL is under stocked? Remember, the water of HL was excessively warm much of the summer. Does heat stress slow down or stop fish from feeding or change their behavior in other ways? The question and the challenge is to figure out where these fish are and when (or even if) they feed during the largest part of the summer.

### Idaho Fish & Game Report Damon Keen, Assistant Hatchery Specialist

Fishing success on Henrys or any other body of water varies greatly based on many factors. This is observed in variable catch rates from year to year, season to season, and even day to day. For the last couple of years, the catch rate on Henrys was approximately .5 or two hours per fish. That catch rate is right at the 20 year average. Additionally, the numbers of fish over 8 pounds caught during those two years was probably as good or better than any year in recent memory. If you consider those two measurements of fishing success, fishing on Henrys is certainly not in an overall decline.

Without question, the 2007 summer fishery on Henrys was down from the 05-06 seasons. Most anglers and personnel within the department were anticipating a good year based on the last couple of years fishing success and the population estimates. The summer season was spotty at best. Some possible reasons for the slow fishing include a very early spring thaw and exceptionally warm water conditions for most of the summer. Regardless, the angling was disappointing. However, the summer was followed by a great fall, especially October. We heard many terrific reports and saw some exceptional fish. Although we didn't see or hear of as many fish 8 pounds and over, those big guys were still being caught at a decent rate. There were good numbers of smaller fish caught and the 3-4 pound

cutthroat were caught in abundance. Although it seems that good news travels a little slower than bad news on Henrys, we saw many happy anglers during the fall of 2007 and smiles were much more common than frowns. For the diligent angler, Henrys again fished with the best of 'em.

Is Henrys in overall decline? Not hardly. However, enduring multiple years of drought and warmer than normal temperatures has contributed to extreme conditions that prove to be challenging. Catch rates can and will always vary. The most successful anglers are folks that learn to fish Henrys in various conditions, and seasons and fish with perseverance. Certainly, if you put in your time at Henrys, there will be days when the angling is slow. However, there will also be days that will be remembered for a lifetime. The best angler I've ever met told me many times that it really didn't matter to him what the reports were, good or bad. He was most interested in making his own reports. It always surprises me how many anglers don't fish because of one or two other angler's reports. I encourage you to find out for yourself. And hope for more of the liquid that gives Henrys life.

### Project Report By Phil Barker, Vice President

At the last HLF board meeting, 5 project-funding requests were presented by Phil Barker, Bob Bartsch and Damon Keen to the HLF board members for approval. The board unanimously approved the funding of all the requests. In order to better educate and communicate the status of all the projects, the project work of the foundation will now be classified into 4 different work groups moving forward: Natural Production, Hatchery

Production, Water Quality and Fisheries Management. By design this will allow the foundation to more closely align with the work efforts of IDFG and ensure that we are covering all our bases when determining how best to spend the contributions of our supporters.

The first project falls within the Natural Production work group and will consist of the installation of a self-cleaning screen for the upper Targhee Creek. The installation of the self-cleaning screen will stop fish, both spawning adults and small fry, from entering the irrigation channel on upper Targhee Creek. Although the exact number of fish that could be saved is difficult to estimate, the screen is a necessary aspect of the overall improvement of fish passage in this most

important tributary. An application has been submitted to FRIMA (Fisheries Restoration and Irrigation Mitigation Program) to share the \$16,000 total cost of this project. FRIMA requires that 35% of the funding for the project be contributed by a non-federal entity or approximately \$5600.00. The engineering department of IDFG will run the site survey and will contribute that function in-kind towards the 35% requirement. Additionally, Damon Keen has volunteered his time as an in-kind contribution. The balance of the project cost of approximately \$3500.00-\$4000.00 will be funded by the HLF.

The second project that was approved is for the installation of a self-cleaning screen on lower Howard



Damon Keen (left) and Phil Barker at the diversion site on upper Targhee Creek where a fish drum will be placed to prevent the loss of fish into the fields below.

Creek. This project is very similar to the project on upper Targhee Creek. Similarly, an application for co-funding has also been submitted to FRIMA for this project. The balance of the project cost of approximately \$3500.00-\$4000.00 will be funded by the HLF.

The third project that was approved is for the installation of a re-circulation pump for the fish hatchery (aka fish trap). This project falls within the Hatchery Production work group. The inlet and spring inflow to the hatchery in low water years is an overall concern. Installation of a re-circulation pump that takes lake water to the inflow would ensure consistent inflows. Low water conditions impact the passage of fish into the hatchery during low water conditions. The re-circulation pump is a precaution such that a spawn year is not adversely impacted. Although somewhat expensive, the device

will provide a 'safety valve' during extremely low water years. Improved water flow will improve overall conditions within the fish trap, including improved oxygen levels. Improved water flow and oxygen levels result in a healthier spawning adult and improved egg quality. The HLF board approved \$10,000 in funding for this project. IDFG has volunteered to do the necessary engineering.

The fourth project that was approved was for the purchase of an egg separator. This project also falls within the Hatchery Production work group. Over 4m eggs are manually separated annually. The separation process removes dead eggs from the live eggs. The more eggs we can separate efficiently the better. In addition to reducing person hours spent during the spawn, the handling of the eggs is greatly improved. Over time this should have a net positive effect in the number of quality eggs distributed to the hatcheries used to stock Henrys Lake. The HLF budgeted \$9,500.00 for the purchase of a double wheel Jensorter egg sorter (Model Jx).

The fifth project that was approved was actually the expansion of an existing project to fence areas on Duck Creek. The original project was focused on installing fencing to prevent cattle grazing on riparian areas next to Duck creek and Kelly Springs. In addition, a hardened water site was to be installed on Duck creek along with a culvert crossing on Kelly Springs, to allow the landowner access to the Duck creek pastures. The HLF agreed to \$5000.00 dollars of funding for the original project. As IDFG was surveying this project, it was determined that this would also be a good time to deposit a rock structure below the Taft diversion. This rock structure would increase the water level below the diversion and allow for improved fish passage at this diversion. Although fish currently pass the diversion, depending on water flow there is some loss of passage at this site. This diversion is the lowest structure on Duck creek and improving passage would benefit natural production on this stream. The HLF agreed to fund an additional \$2500.00 for the rock structure enhancement in conjunction with co-funding from US Fish and Wildlife.



HENRYS LAKE FOUNDATION P.O.BOX 1389 WEST YELLOWSTONE, MT. 59758

