



**HENRYS LAKE  
FOUNDATION**

c/o Mike Glenn  
Secretary-Treasurer  
227 University Avenue  
Twin Falls, Idaho 83301

-or-

c/o Richard Prange  
President/Newsletter  
Coordinator  
2320 Independence Drive  
Boise, Idaho 83706

ADDRESS CORRECTION REQUESTED

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# NEWSLETTER



The Henrys Lake Foundation invites you to join our non-profit, tax exempt corporation. This organization was formed to preserve protect, and enhance Henrys Lake now and in the future. All proceeds will be used directly towards the improvements of this great fishery with no funds going for administration or salaries. Just fill in the information below and send this application with your contribution so that you can be a part of the HENRYS LAKE FOUNDATION.

NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY, STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Please enroll me as a member. Enclosed is a check for \$10 annual dues or \$100 life membership. I'm also enclosing \$ \_\_\_\_\_ as a additional donation (strictly optional).

Thank you—Mike Glenn, Sec.-Tres.—227 University Ave.—Twin Falls, Idaho 83301

February 1986



## HENRYS LAKE FOUNDATION

### NEWSLETTER

#### WORDS FROM THE PRESIDENT

by Richard Prange

As Henrys Lake lies in hibernation under a blanket of ice and snow, its an appropriate time to contemplate. Have you ever pondered about some of the unique aspects of Henrys Lake? At 6472 feet elevation, this 6500 acre lake is situated just below the crest of the Continental Divide on the Pacific Ocean side. Its a shallow water body- with an average depth of about 12 feet and a maximum of 21 feet. The numerous streams that feed Henrys Lake contribute substantially to it's water supply, but much of the volume gushes from lake bottom springs. These springs provide an everlasting supply of cold, oxygenated, nutrient-rich water that help trout to flourish year round. Through frigid winter, the springs replenish oxygen deficient lake waters and save countless fish from the grips of winter kill. As water temperatures reach a warm, mid-summer peak, these same springs can provide comfortable refuge to stressed trout. The spring resources of Henrys Lake undoubtedly play a prominent role in sustaining it's fish life from year to year.

In earlier times, before the dam and fish hatchery were built, trout reproduction at Henrys Lake occurred naturally in the outlet creek and the streams that entered the lake. Ripe and wild adult trout would migrate into the lake tributaries, locate suitable gravel beds and complete the spawning ritual. Later, after egg maturation, young larval fish would emerge through the gravel substrate to begin their growth and eventually drift downstream as juveniles to the stillwater environment of Henrys Lake. Depending on the stream, there was probably great variance in the timing and hazards of this spawning/rearing cycle. These wild fish competed for space and food, and had to escape from predators-- it was strictly survival of the fittest. Each stream's natural selection process led to surviving progeny that provided much genetic vigor and diversity in the trout population. As late as 1956, D. Andriano, a biologist for the Idaho Department of Fish and Game, conservatively estimated that some 40,000 cutthroat spawned in the tributaries of Henrys Lake. Today, this cycle is still repeated, but to a much lesser extent. Tributary habitat degradation has dramatically reduced wild fish reproduction and survival in the Henrys Lake ecosystem.

We are fortunate in having a hatchery program to provide an artificial means for supplementing the lack of natural production at Henrys Lake. The hatchery has allowed us to administer the hybrid and brook trout programs. Cutthroat hatchery plants have been primarily used to circumvent poor recruitment of young wild fish to the lake. Recently, in the last couple of years, the hatchery has successfully given a quick fix to the cutthroat fishery-- to the point that too many fish may now be in the lake for optimum growth. But there is danger in such heavy reliance on this approach to maintain the fishery of Henrys Lake. There has been and will continue to be unforeseen fish rearing accidents in hatchery programs such as disease outbreaks or water supply/water quality problems. Other stocking programs may take priority for hatchery

raceway space. At these times, Henrys Lake's needs may not be met. Operating fish hatcheries is not cheap in these times of austere agency budgets. A more subtle danger is that even though hatchery stocks were derived originally from wild fish, each generation of artificial fish culturing can repeatedly select for genetically similar fish. Over the years, for instance, the Henrys Lake hatchery program has selected earlier arriving brood spawners to assure meeting egg quotas and planting demands elsewhere. This has meant that the genetic mix, values and traits of later spawning fish have not been infused into hatchery produced cutthroat. What will be the ultimate consequence of repeated outplanting of these stocks to Henrys Lake? A population of clone fish- weak in genetic diversity? In contrast to this approach, most biologists of today acknowledge the wisdom of assuring "population stability through maintaining genetic diversity".

Thus we can see the importance of restoring the once abundant wild fish reproduction in the tributaries of Henrys Lake. This can be accomplished by implementing the habitat improvements identified in the Henrys Lake Enhancement Plan. This plan represents a long term investment in the fishery future of Henrys Lake. By bringing back the quality of trout spawning and rearing habitat in these streams, we will be assuring recruitment of a rich genetic mix of wild stocks into the lake fishery- in concert with the hatchery effort. The Henrys Lake Foundation is committed to providing money and resources for Enhancement Plan projects. Lets stay on course to getting that job done.

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If you have moved since you paid your last dues without sending us your new address, you probably haven't been getting the Newsletter. This is because the U.S. Postal Service does not forward general bulk mail. In an effort to update our mailing list and get the February 1986 Newsletter to some long lost members, we're making special request to the post office that your new forwarding address be provided. This is a one time venture only, to see if it will be cost effective. It will cost the Foundation about 50 cents for each Newsletter so processed. We're hoping this effort will bring us membership renewals (see John O'Neall's appeal for membership renewals). For those of you who are getting the Newsletter for the first time in awhile- please renew your commitment and membership dues. In the future, send your new mailing address to Mike Glenn, Henrys Lake Foundation Secretary-Treasurer, 227 University Ave., Twin Falls, ID 83301, so we can keep the Newsletter coming your way.

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The annual meeting of the Henrys Lake Foundation will be held at Henrys Lake this year on Saturday, July 5. Plan some vacation time around this date and attend our pot luck and meeting and join in some fellowship with others who cherish this beautiful spot. An added attraction is that the damsel fly hatch normally peaks during the first half of July and this can be some of the season's best fishing at Henrys Lake.

#### THE PASSING OF JIM WRIGHT

by John O'Neall, Jr.

The very sad news of the death of one of our Directors, Jim Wright of Roswell, New Mexico, on October 30, 1985 has recently reached us. Jim and Kathleen had settled into their winter home in South Texas when a sudden cerebral hemorrhage was suffered at breakfast time, and he passed away in early afternoon with Kathleen at his bedside.

For more than twenty years Jim was a familiar sight daily in his maroon boat, fishing in all areas of Henrys Lake, but particularly around Staley Springs. He and Kathleen arrived at the beginning of the season every year and usually stayed until ice was about to take over. He was a friendly and outward going person, and knew literally hundreds of fishermen who frequented the lake. He always knew the latest fly pattern that would catch fish and shared that information with anyone seeking help. From the beginning of the Henrys Lake Foundation several years ago, Jim Wright was one of its most enthusiastic members. He spread the word to all who would listen and secured more new members for the Foundation than any other individual. His last act on our behalf was working three days in September on the fencing project and the hybrid fin clipping project.

Jim Wright was laid to rest in the National Cemetery in Sante Fe, New Mexico. He was retired from the service. Messages can be sent of Mrs. Kathleen Wright, 1411 Sloan Street, Weatherford, Texas 76086. Her telephone number is (817) 594-6177.

A HISTORY OF HENRYS LAKE: POST REGISTER OF AUGUST 18, 1985- by Tamra Cikaitoga (This is the first of a two part article on some history of Henrys Lake. It was submitted by Foundation Director, George Lang.)

When William Henry Jackson came to Henrys Lake in 1872, he found something he didn't expect- Gilman Sawtelle, a white settler very much at home raising cattle and working the land. Jackson came to Idaho to take photographs of the mysterious floating islands that he had heard tales of from trappers and explorers, while part of the Hayden photography expedition assigned to document Yellowstone National Park. Jackson's photographs are the first known recorded history of the Island Park area. Jackson had been assigned to photograph the Teton Mountain Range, where he and his companions met the Snake River and followed the Henrys Fork north to Henrys Lake. He found the unusual islands that had prompted him to seek out the lake..."It is a shallow body of water about two by three miles in diameter and full of small scattered islands and the source of the Henrys Fork- it is well stocked with the most excellent trout."

The natural lake had been named for Major Andrew Henry, a partner and field captain for a St. Louis, MO, fur company that explored and trapped in the area in 1810-1811. Other important visitors to the lake were Chief Joseph and General Oliver Howard, who relentlessly pursued Chief Joseph during the Nez Perce War of 1877. Howard Springs and Howard Creek were named for the general. William Jackson had expected to find Indians at Henry Lake but he hadn't anticipated white settlers. This northernmost portion of Island Park served as a natural summer site for generations of Indians returning to hunt and fish. The mountain which resembles a sleeping Indian chief overlooking Henrys Lake was named for Sawtelle. However, through the years the spelling of the name has changed, dropping the final letter.

Gilman Sawtelle homesteaded the area now known as Staley Springs and after trying his hand at raising livestock, he turned to commercial fishing. Wagon loads of fish were taken 50 miles to Virginia City, MT, and the effort proved profitable for Sawtelle and other early settlers. The majority of fishing in the late 1800's was done during the winter when the lake was frozen over with a thick covering of ice. The fishermen would often build small houses without floors to be set on the ice. Holes were cut in the ice so they could fish without being exposed to the elements. The fishermen might have seven or eight poles or more in the water at the same time.

Joseph Sherwood operated the first post office and general store in his

home along the north shore of Henrys Lake, then known simply as Lake. Acting as an agent, he bought fish from local fishermen for the shipments to Montana. In a letter to an interested buyer dated October 31, 1892, Sherwood wrote, "The amount of fish usually caught in winter here varies from 50 to 90 thousand pounds." A top price was considered to be about 9 cents per pound, but generally the fishermen had to settle for less. Sherwood also started one of the first fish hatcheries in the state near where the Idaho Department of Fish and Game hatchery is presently located on the north shore of the lake.

The mysterious islands that awaited William Henry Jackson were actually large accumulations of logs and debris. Over the years several of these "islands" became covered with grass and some even sprouted small bushes and trees. Folk lore tells of trappers and other travelers setting up camp along the shore of Henrys Lake only to awake the following morning to find themselves adrift on one of the islands. Other stories tell of area residents going to the rescue of wild animals or a rancher's livestock adrift on the islands. In 1924, the islands were dynamited and removed to prevent clogging of the dam built on the Henrys Lake outlet that year. At the time of the dam construction, the level of the spring-fed natural lake rose by approximately one-third to provide storage for irrigation water.

Stagecoaches were the mode of mass transit through Henrys Lake Flats. Stage stops for the various lines were at the Sherwood Store, the Targhee Ranch and Dick Rock's Ranch. Only one stagecoach holdup was recorded in the 1880's near Bullwhack Springs, later renamed Howard Springs. The coach was believed to be carrying visitors to Yellowstone National Park when two highwaymen took their valuables and left without incident.

#### HLF FINANCIAL HEALTH AS OF JANUARY 22, 1986

Checking Account -----	\$4431.21
Certificates of Deposits (14 original life members) -----	1400.00
Total -----	\$5831.21

#### AN APPEAL TO PAST HLF MEMBERS

by John O'Neal, Jr.

Just four years ago fishing was at such a low ebb at Henrys Lake that the inclination was to chuck it and hunt a new fishing hole. But rather than do that we all banded together and formed the Henrys Lake Foundation in an effort to bring the lake back to life. The effort has been very successful- once again Henrys Lake is providing great fishing all season long.

You joined the Henrys Lake Foundation and paid your dues to help in this effort. In order to keep new projects going and to safeguard the future of Henrys Lake, we need your continued participation. Please renew and sustain your membership (\$10 annually) so the Foundation can go ahead with the many future projects that need to be done. There is a coupon to fill out for your convenience in the Newsletter. Please mail it to Mike Glenn with your check. If you are interested in fishing Henrys Lake, the Newsletter alone will justify your yearly dues. Please stay with us in the drive to keep Henrys Lake great in the future.

IDAHO DEPARTMENT OF FISH AND GAME CORRESPONDENCE

The following three pages contain correspondence that has been received from the IDFG over the last few months. Due to space limitations, I apologize for having to reduce the print size and the sideways presentation. Scott Grunder, last years IDFG Seasonal Biologist at Henrys Lake, provided the below listed scale sample/growth data by telephone recently. Each year of growth shows as an annuli ring on the fish scale sampled. For the table below, 1 inch = 25.4 millimeters (mm), n = the total number of fish sampled, and NS = none sampled.

Average Length of Fish (mm) by Age Class

Annuli (age class)	(n=363) 1950-51	(n=32) 1977	(n=56) 1983	(n=115) 1984	(n=128) 1985
1	132	148	121	104	98
2	292	295	260	213	220
3	417	409	332	292	333
4	500	466	415	401	NS
5	533	533	NS	NS	NS



IDAHO DEPARTMENT OF FISH AND GAME  
REGION 6  
1515 Lincoln Road  
Idaho Falls • Idaho • 83401

November 12, 1985

Mr. Richard Prange  
Henrys Lake Foundation  
2320 Independence Drive  
Boise, Idaho 83706

RE: Henrys Lake fish marking operations.

Dear Richard:

Just a short note of thanks to the Foundation, and specifically to the individuals involved, for the assistance in adipose fin clipping of sterile hybrids prior to release into Henrys Lake. Fred Grimes, Tom Grimes, Jim Wright, Clarence Wright, Leonard Manniner, Bill Schiess, Harry Tupper, Wilbur Longhoffer, Walt Stephens, Grant Hamilton and Bill Lynch all provided assistance in the fin marking. Through their efforts, we will be better able to evaluate the performance of the experimental sterile hybrid group two and three year fish now as they enter the fishery. The plan is to evaluate growth and sexual maturation, or the lack thereof, versus the regular hybrid release in 1985.

Thanks again to the Foundation for the help. These individuals deserve a pat on the back in your news letter.

Sincerely,

*F. Steven Elle*

F. Steven Elle  
Regional Fisheries Manager  
Region 6



Region 4  
868 E. Main, P.O. Box 428  
Jerome, Idaho 83338  
Telephone: (208) 324-4350

December 23, 1985

Richard Prange  
2320 Independence Dr.  
Boise, ID 83706

Dear Richard:

Steve Elle has informed me that you wanted 1985 fisheries data from Henry's Lake. I've been in the process of tabulating most of it the past month so here it is:

Creel Census Data

Catch rate = 1.28 trout/hour  
Total catch = 161,346 trout  
Trout harvested = 37,921 (24%) trout  
Trout released = 123,425 (76%) trout  
Total angler effort = 125,666 hours

Mean Length (mm/in) of Trout in Harvest

Cutthroat Trout = 377 mm (15 in.)  $\pm$  32 mm; n = 435  
Cutthroat X Rainbow Hybrid = 435 mm (17 in.)  $\pm$  44 mm; n = 24  
Brook Trout = 358 mm (14 in.)  $\pm$  42 mm; n = 22

Species Composition (%) of Harvest

92% cutthroat trout  
4% cutthroat X rainbow hybrids  
4% brook trout

Trap Netting Operations

Species Composition and Mean Length

n = 623 trout captured in 8 net nights  
Cutthroat trout = 82% of total;  $\bar{x}$  TL = 394 mm  $\pm$  32 mm  
Cutthroat trout X rainbow hybrids = 1% of total;  $\bar{x}$  TL = 394 mm  $\pm$  88 mm  
Brook trout = 17% of total;  $\bar{x}$  TL = 362 mm  $\pm$  53 mm

Summary of Spawning Numbers

Cutthroat trout spawning run from 3 Mar to 15 May  
3146 females 2831 males  
Hybrid trout spawning run from 3 Mar to 15 May  
58 females 230 males

The fish ladder was shut down early this year because the egg-take requirement was met at 5.86 million eggs. The hatchery superintendent estimated at least another 20,000 fish were gathered at the mouth when the ladder was closed.

Cutthroat trout spawning run from 20 Oct to 30 Nov  
550 females 160 males  
Hybrid trout spawning run from 20 Oct to 30 Nov  
10 females 11 males

If there is any other information you require, please let me know. I'm sending along a business card for reference, and besides, I have about 1,000 of them to give away now. Thanks for your interest.

Sincerely,

A handwritten signature in cursive that reads "Scott Grunder".

Scott Grunder  
Regional Fishery Biologist

SG/1m



IDAHO DEPARTMENT OF FISH AND GAME

REGION 6  
1515 Lincoln Road  
Idaho Falls • Idaho • 83401

January 27, 1986

Mr. Richard Prange  
President  
Henry's Lake Foundation  
2320 Independence Drive  
Boise, ID 83706

Dear Rich:

Thank you for your letter regarding Henry's Lake fisheries management and habitat improvement. The management plan for Henry's Lake outlines specific habitat improvements which are prioritized as 1) fish passage, 2) irrigation diversion screening and 3) riparian zone fencing. The Department has initiated some work on Targhee Creek concerning both upstream fish passage and downstream screening. As you noted, the improvements have met with only limited success. As a result, our efforts during 1986 will be to improve the access through the Targhee Creek highway culvert and improve the efficiency of the fish screens on Targhee Creek.

During fall 1985 IDFG met with Idaho Department of Transportation and reached agreement on modifications to the Targhee Creek overflow culvert to improve fish passage. Weather prevented the work from occurring in 1985, and we are currently planning on lowering the upstream end of the overflow culvert and adding baffles during 1986. When completed, we anticipate full access for upstream migration.

Department personnel will work with Al Frazier to modify the water intake to the upper irrigation diversion on Targhee Creek. We will also operate a trap downstream of the upper diversion screen to evaluate whether juvenile cutthroat pass through or around our rotary screens. Based on results, we will either modify screens or reset the screen in the second diversion canal.

The Department is currently negotiating with Al Frazier to modify the Howard Creek flume outfall to improve upstream fish passage on a temporary basis.

• EQUAL OPPORTUNITY EMPLOYER •

Mr. Richard Prange  
January 27, 1986  
Page 2

IDFG strongly supports the work of the Foundation during the fall of 1985 on the Duck Creek fencing project. The Foundation did an excellent job of organizing the project and working with John Magleby to gain permission for the pilot project. The Department did not participate in the fence construction at the request of the Foundation. We have set up photo points to visually monitor the riparian recovery which results from the fencing project. During 1986 we will begin fish population monitoring within and upstream of the fence enclosure. Recovery monitoring will continue for the next four years.

Population estimates will also be completed in the fenced and unfenced sections of Howard Creek during 1986. The data will be used in conjunction with the Duck Creek population data to build a support case for future fencing projects.

You referred to a land ownership document in your letter. We would appreciate a copy to compare it with our records. Land ownership will assist us in approaching owners on Howard Creek for possible fencing projects.

You accurately pointed out some of the Department's deficiencies during 1985 and we are working to address those issues in 1986. However, you failed to recognize some of the projects at Henry's Lake which required major amounts of time. Our Department put a major effort into meeting and negotiating with the North Fork Water Company to prevent drawdown of Henry's Lake related to dam reconstruction during 1985 and 1986. Also approximately 100 man days were expended marking fish for the evaluation of hatchery cutthroat brook, and sterile hybrid trout releases. Organizing and participating in the fin clipping took time away from some of our other projects, but it is very important to gain some measurement of the contribution of hatchery versus wild fish to the creel at Henry's Lake.

During 1985 we also completed another season of creel census and hatchery enhancement. Scott Grunder has sent you a copy of the data summary. If additional information is needed, please give me a call.

Henry's Lake Foundation has provided valuable support in the past several years for management activities at Henry's Lake. The generous monetary contributions by the Foundation for habitat improvement have enabled the Department to begin addressing chronic problems. We look forward to the 1986 season and continued cooperation with the Foundation to implement the items discussed above.

Sincerely,

*Herb A. Pollard II*

Herbert A. Pollard II  
Regional Supervisor  
Region 6