



HENRY'S LAKE  
FOUNDATION

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

-or-

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



# NEWSLETTER



The Henry's Lake Foundation invites you to join our non-profit, tax exempt corporation. This organization was formed to preserve protect, and enhance Henry's 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 HENRY'S 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

April 1985



## HENRYS LAKE FOUNDATION

NEWSLETTER

### THE NEWSLETTER

The Henrys Lake Foundation has a new look! We now have a logo for our correspondence and newsletter that will identify the Foundation and add stature to our efforts. The logo design and art work were donated by Don Gerhardt Advertising of Sandpoint, Idaho. Many thanks for your efforts Don. The Foundation also recently qualified for a nonprofit organizations bulk mailing permit which will cut our newsletter mailing costs in half and allow it to be in a flyer format. This will mean less money for information distribution and more money for project work at Henrys Lake.

We will plan to put out the newsletter a minimum of three times per year. It will be sent out between November and June to coincide with the offseason at Henrys Lake. Each mailing of the newsletter will be sent to a few non-Foundation members in the hopes that they will realize the Foundation's value, join our ranks, and make a commitment to help reestablish quality trophy trout fishing at Henrys Lake. Please note the membership blank on the cover of the newsletter. Don't forget your dues contribution of \$10 per year or more is tax deductible. If each existing Foundation member could recruit just one new member this year, we could double our size and funds accumulation for fishery improvement work at Henrys Lake.

### HENRYS LAKE FOUNDATION MEETING

The annual picnic and meeting of the Henrys Lake Foundation is scheduled for the afternoon of Saturday, July 6, this year. The site has not been firmed up as yet, but as in the past, it will be at one of the lodge locations on the lake. Plan on a pot luck affair and a good program of speakers. Following the picnic, there will be a business meeting/election of officers and trustees. It is important that all present trustees make an effort to attend this meeting. We will have the picnic-meeting location set in the June newsletter.

### MEETING WITH IDAHO DEPARTMENT OF FISH AND GAME

by Richard Prange

On March 5, Mike Glenn and I met in Boise with Monte Richards and Steve Elle of the Idaho Department of Fish and Game to discuss the 1985 outlook for dam repair work and potential fishery enhancement plans for Henrys Lake. Monte Richards is Chief of Fisheries for Idaho Department of Fish and Game, and Steve Elle is the Region 6 Fisheries Manager that deals with Henrys Lake matters. Following our meeting, Steve sent me a letter that is included in the April newsletter which restates some of the things we covered.

At the present time, the extent of dam repair work necessary and when it will be done is unknown. As Steve's letter points out, there is core drilling to be done this spring followed by an evaluation of what repairs are needed. Actual work this year on the dam could be minimal, with most being deferred till 1986. We will be in contact with authorities and hope to have updated information in the next newsletter. Mike and I were assured by Monte and Steve that Idaho Department of Fish and Game was committed to work with the North Fork Water Company to minimize lake drawdown during repairs and to do whatever is necessary to maintain the health of the Henrys Lake fishery. So at this point, you should plan your Henrys Lake fishing trips for the upcoming season without hesitation.

A 7-month Idaho Department of Fish and Game fisheries technician will be at the lake this year to conduct creel census, stomach analyses, and tributary investigations. One important task will be the evaluation of possible problems with the two new fish screens installed last year on Targee Creek irrigation diversions. There has been some evidence that they are allowing juvenile trout fry to pass into irrigation ditches. Idaho Department of Fish and Game will not pursue constructing screens on other tributaries in 1985 until the bugs are worked out on the Targee Creek screens. Additional gabion construction is planned this year to improve spawner fish passage through the main highway culvert on Targee Creek. There are several miles of outstanding spawning/rearing habitat on upper Targee Creek that remains underused because of fish passage difficulties through the culvert during spring runoff periods. Spawners taken in Hatchery Creek this spring in excess of egg needs will be released to seed other tributary streams around the lake to help nurture more natural production. Research will also be conducted to compare juvenile fish populations in tributaries having good and poor riparian (streambank vegetation) conditions. This should validate the need for and value of fencing degraded stream sections to enhance spawning and rearing fish habitat. Such fencing, however, would only be done with voluntary approval of the landowners and at no expense to him. Stream habitat improvement is a principal use of funds contributed by the Henrys Lake Foundation.

Enforcement activities at Henrys Lake will be on par with last year. We can expect one or two large scale "sting" efforts. The fishing should be excellent again, which will tempt the unethical fisherman to harvest more than regulations allow.

As Steve Elle notes in his letter, the average size of Hatchery Creek cutthroat spawners in 1984 was down over previous years. The data indicates that the lake is overpopulated for optimum fish growth. They therefore intend to cut the cutthroat releases by half this fall but will be releasing larger numbers of hybrids and brookies. That is good news for most veteran Henrys Lake anglers. Overall, in 1985 we can expect similar catch rates to last season.



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

March 26, 1985

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

Dear Richard:

As a followup to our phone conversation on March 20, I have summarized the Department's plans for hatchery enhancement in 1985. The long-term goals for fish plants call for 2,000,000 cutthroat, 200,000 hybrids and 100,000 brook trout to be released annually. In 1984 the Department's actual release was 2,035,000 cutthroat, 134,600 hybrids and no brook trout.

The Department has not consistently met its goals for hybrid or brook trout releases during the past several years. As a result of past shortfalls, special emphasis has been put on the Henry's Lake hatchery program for hybrids and brook trout production during 1985. We took 40,000 brook trout eggs from Temiscamie stock at Henry's Lake during fall 1984. We received 100,000+ eggs from New York in January 1985. Combined, we will release 100,000 or more Temiscamie in fall 1985. We are currently in the process of the 1985 hybrid spawning. We will take 300,000 hybrid eggs to insure our target release of 200,000 fry. In addition, another 150,000 hybrid eggs will be heat shocked to carry out the Department's first sterile hybrid mass production experiments. Fall releases will include the 200,000 normal hybrid releases plus approximately 100,000 sterile hybrids. Hybrid spawning is taking place during March this year to insure the greatest growth of hybrids possible prior to release. Early spawning also allows time to compensate for unexpected hatching mortalities or poor fertilization rates.

Length data from 1978, 1983 and 1984 cutthroat spawning runs indicate the large hatchery releases of cutthroat annually since 1981 plus fairly good natural production have started to depress growth of cutthroat. Age three spawners in 1983 and age three and age four and five spawners in 1984 were about 30 mm smaller than similar age groups in 1978 (prior to increased hatchery releases).

• EQUAL OPPORTUNITY EMPLOYER •

Mr. Richard Prange  
March 26, 1985  
Page 2

As a result of depressed growth the Department believes lake carrying capacity has been reached or exceeded. The Department will decrease the 1985 and subsequent annual releases from two million down to one million fry. Surplus adult cutthroat will be released into tributary streams to allow them to spawn naturally.

Overall, we anticipate a large surplus of cutthroat spawners to Hatchery Creek in 1985. Therefore, we will be able to complete the hybrid and cutthroat egg takes at an earlier date to attain the best results. After several problem years, we anticipate 1985 will allow us to meet our hatchery goals.

I discussed Henrys Lake Dam repairs with Dave Rydalch on March 21, 1985. The latest update includes the following:

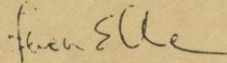
1. The North Fork Water Company has received a permit to store water in 1985 from Idaho. Essentially this allows them to put off any repairs (if needed) at Henrys Lake Dam at least until fall.
2. Forsgren and Perkins Consultants will analyze core samples of the dam for structure integrity as soon as weather conditions permit (late May or June).
3. The Water Company will review the spillway structure for maintenance needs this summer. If maintenance is required, it can be done with a minor drawdown (one-two feet) and coffer dam.
4. The Water Company will review radial gate structures for maintenance needs this summer. If maintenance is required, this could necessitate a major drawdown and the old style coffer dam. Note: This is the item I'm most concerned about. The Department is taking a "wait-and-see" stance on this repair.

We will begin negotiations with the Water Company immediately if they determine work on the radial gates or the total dam structure is required.

We discussed trapping of Targhee Creek beginning in May for enumeration of outmigrant juvenile trout. Due to high runoff in Targhee Creek we may not be able to carry out this program. We will try to identify a possible trapping site and acquire trespass permission during April.

If there are any other specific questions you need answered for your newsletter, please call me.

Sincerely,



Steve Elle  
Regional Fisheries Manager  
Region 6

SE:ai

FISHERY INFORMATION

The following data provided by Steve Elle should be of interest to Henrys Lake anglers. Catch rates indicated for 1984 could be the best in the lake's recorded history. We need to, of course, now work on getting the average size up so that more trophy fish show in the catch.

CREEL CENSUS RECORDS FOR HENRY'S LAKE

	Effort (Hours)	Fish Harvested	Catch Rate (fish/hr)		Percent Released	Catch Composition (%)		
			Harvest	Total		CT	Hybrid	Brook
1950	17,008	12,246	.72	.82	12	77	-	23
1951	27,947	12,302	.44	.50	12	80	-	20
1971	102,233	36,720	.36	.36	0	70	14	16
1972	83,800	27,027	.32	.32	0	69	19	12
1975	86,304	29,914	.35	.38	10	89	-	11
1976	68,109	18,650	.27	.54	49	81	.1	19
1977	66,139	16,466	.25	.44	44	71	.4	29
1978	85,304	25,510	.30	.48	37	48	20	33
1979	93,921	18,728	.20	.32	37	35	42	24
1980	68,446	9,262	.14	.21	37	31	59	10
1981	65,918	7,471	.11	.21	47	30	54	16
1982	63,273	7,071	.11	.45	75	62	25	13
1983	95,996	25,447	.23	1.23	81	84	9	7
1984	162,878	47,017	.29	1.70	83	92	5	3

HENRY'S LAKE FISH STOCKING 1977 THROUGH 1984

Year	Cutthroat		Hybrids		Brook trout 1	Comments
	Fish Released	Size	Fish Released	Size		
1977	824,430	2783/1b	200,200	364/1b	137,000 (G)	drought hybrids= SH x CT
1978	946,362	4968/1b	178,560	279/1b	88,000 (G)	drought hybrids= SH x CT
1979	1,133,659	1744/1b	125,081	324/1b	51,000fry(G) 45,318fin(G)	drought hybrids= SH x CT
1980	1,039,845	251/1b	32,320	204/1b	82,000 (G) 6,000 (A)	
1981	2,294,972	203/1b	138,000	230/1b	20,000 (T)	
1982	2,440,000	156/1b	234,000	234/1b	18,400 (T) 2,500 (A)	
1983	2,179,000	228/1b	228,510	337/1b	21,602 (T)	
1984	2,035,000	297/1b	134,627	673/1b	no release	disease brk, small hybrids

<sup>1</sup> Strains of brook trout noted in parenthesis. G = generic, T = Temiscamie, A = Assinica

## HENRYS LAKE HYBRIDS

by Bob Rohrer

As Henrys Lake anglers are aware, the very popular and high quality hybrid (cutthroat trout x rainbow trout) fishery has declined precipitously in the past 3 years (1982-84). This is directly related to stocking densities in previous years and to the strain of hybrid we stocked from 1978 through 1980. From 1978 through 1980, the only crosses used were cutthroat trout and steelhead trout which showed poor survival after year 2. Essentially, 200,000 hybrids were planted during the period 1976 through 1978. However, in 1979, 1980, and 1981 we only planted 125,000, 32,000, and 145,000 hybrid trout, respectively. We did stock over 200,000 hybrids each year in 1982 and 1983, so hybrid catches should be up in 1985 and 1986.

Work continued on the sterile hybrid program during the spring of 1985. Sterile hybrids are produced by immersing the eggs after fertilization in a warm water bath for a short period of time. The Henrys Lake Foundation has provided a small sum for support of this project the past several years. The goal of this program is to produce sterile hybrids to eliminate or greatly reduce spawning opportunities with native cutthroat trout plus the project offers the possibility of rearing very large trout. Dr. Gary Thorgaard of Washington State University suggests that if these sterile hybrids do not produce eggs, growth could be further enhanced. Gary has assisted with the project now for several years. In 1985, Hatchery Superintendent Lynn Watson heads up the operation and has been working on a warm water bath to expedite mass production of these trout.

The goal for 1985 is to stock 200,000 normal hybrids and up to 100,000 sterile hybrids as a bonus. These groups of fish will be marked and their progress followed via the creel census in future years.

## SOME HENRYS LAKE HISTORY

The Henrys Lake hatchery was built by private sources on the shores of the lake in 1922. The Idaho Department of Fish and Game began its operation of the hatchery in 1924. Millions of cutthroat trout, hybrid trout, and brook trout have been planted through Hatchery Creek to enhance the renowned fishery.