1983

WORDS FROM VIRGIL MOORE - Region 6 Fisheries Manager

Things have been hopping on Henrys Lake. The hatchery enhancement program is showing results this year. As of August 5, fishing effort, as determined by Dave Cole, was 68,000 hours with a catch rate of 1.3 fish/hour and .28 fish/hour for those harvested with a release rate of 78 percent. Average size of harvested fish was 15 inches for cutthroat, 16.6 inches for hybrids and 15.6 inches for brook trout.

The fishery so far in 1983 exceeds all effort and catch rates found since 1951. Catch rates in 1982 were .45 fish/hour and .11 fish/hour. The size of harvested trout creeled is still about two inches smaller than planned for Henrys Lake fish. This should increase over the next two yea

Planting of Henry's Lake took place the last week of September. Approximately 2.3 million cutthroat at 300/lb were stocked. Heavy plants of cutthroat in Targhee Creek and Howard Creek were undertaken to assure good runs develop in the coming years.

Screening of Targhee Creek diversions will take place the first two weeks of October. Two screens will be constructed and operational for the 1984 spawning run. Much thanks go to the HLF and Island Park Sportsmen for their monetary and other support. We could not have done this much so soon without it.

Screens will also be installed on Howard Creek during the fall of 1984 for the 1985 spawning run. We hope to begin work on screening of Duck Creek in 1985-86, depending on monies available.

Dave Cole's trap net work this last summer has provided additional information on the Canadian brook trout. These fish are now 16 to 18 inches long from the 1980 plant with some mature fish congregating at Hatchery Creek. We intend to spawn these fish and develop a run into the hatchery. We have requested 100,000 Temiscamie brook trout eggs for 1984 planting to further bolster this program.

WORDS FROM BOB ROHRER - Senior Fisheries Research Biologist

Rainbow-cutthroat hybrids were first planted in Henrys Lake in 1950 and an intensive stocking program was maintained from 1951 to 1972. The stocking of hybrids was discontinued in 1972 as a result of the important concern that the cutthroat trout gene pool must not be further diluted, but by 1975, primarily in response to public requests, the Commission directed the Department to manage Henrys Lake as a trophy fishery and reintroduce hybrids. We were then faced with the dilemma of maintaining pure cutthroat for Henrys Lake while stocking fertile hybrids.

Techniques have been developed to practically and effectively produce sterile trout and salmon. Using the heat-shock technique developed by Dr. Gary Thorgard of Washington State University, we began in 1982 and 1983 experimentation to try and produce sterile hybrids. Work is, primarily at the experimental level, but it looks promising and a small number of sterile hybrids were planted in Henrys Lake in 1982 and 1983. More work will be done in 1984 to determine the best time and temperatures for treating the eggs.

A secondary benefit of producing sterile trout is the possibility that growth rates will not level off as typically happens when trout mature and spawn. Think of the possibility of 15-20 pound hybrids at Henrys Lake!

I would like to thank the Henrys Lake Foundation for the small grant to partially fund this important management research project to hopefully put a better product in the creel and maintain the cutthroat trout population. Specific questions about the program can be answered here or Virgil Moore of the Idaho Falls Office.

WORDS FROM JOHN O'NEALL JR. - Fisherman - Henrys Lake Promoter

The summer of '83 provided excellent fishing in Henrys Lake. For the first time in several years it was all smiles on the faces of most fishermen visiting the lake during the summer.

As expected, the average size of the fish was still on the small order throughout the season, but the numbers made the fishing very exciting most of the time. Some veteran fishermen confessed to me that they had caught more fish at Henrys in 1983 (and had more fun) than ever before. Some of the more expert anglers caught 40 or 50 fish--or even more--per day. The blue heeler darn near caught laryngitis. Practically all the fly-caught fish were released. Many sportsmen bent down their barbs to cause less injury to these large numbers in their catch.

Based on the known facts, one would have to predict a fine season for 1984! These fish are going to grow, and we can surely anticipate a larger average size next summer. And the numbers still should be there, especially when you consider that Idaho Fish and Game is continuing the strong fingerling stocking program unabated. Stocking for 1983 was delayed until late September due to high water temperatures early in the month, but anticipated was stocking of 2.3 million fingerling (not fry) cutthroats; 250,000 fingerling hybrids; and 20,000 fingerling brookies of the special Canadian strain.

Incidentally, many of the special strain of brookies, easily identified by a missing fin, were caught during the summer. The ones I saw were a good 16" and plenty hefty and healthy looking. A large percentage were released. They may well create a strong hybrid effect within the species right away, as they will soon reach a spawning age.

Water levels stayed higher in Henrys than I have ever seen them in the fall, which augurs well for fish survival this winter. The water level had risen back to nearly full pool in September. Altogether the stage seems to be set for maximum growth and results at Henrys in the foreseeable future. Say a prayer for high water and no drouth. My mouth fairly waters w[illegible] I consider the potential for this lake in 1985!

When my wife Pat and I left for home on September 22, Fish and Game was scheduled to install the new screens on Targhee Creek the next week. Work also had to be done to improve fish passage under the highway culvert so that spawners can reach the upper waters of the creek. Let's hope all this work was done, for that is where the Henrys Lake Foundation 1983 contribution of $5000 was to be spent. Targhee Creek represents a high percentage of natural reproduction possibilities among the nine small tributaries to the lake.

For a real experience, you should have spent the night of September 19 at Henrys Lake. Suddenly, after weeks of summer weather, there was seven inches of snow on the ground, and the temperature dropped to a record-bursting (and pipe bursting) low of 6 degrees below 0 F. This was three days prior to the end of "summer." Just a gentle reminder to go home.

If you fish at Henrys in 1984, don't overlook driving over to nearby Island Park Reservoir for a day. We had excellent fly fishing there for big rainbows in 1983.

Hope to see you next summer. Best of luck--and tight lines!

WORDS FROM BOB SPATEHOLTS - Graduate Student & Idaho Fish & Game Biologist

I would like to thank all the members of the Henrys Lake Foundation for the two trapnets you purchased for me to use in my study of brook trout in Henrys Lake. I also appreicate the Angler Notices describing the marked Assinica and Temiscamie brook trout which were planted in 1980 and 1981. Angler cooperation was excellent, and several sportsmen reported catching and r[illegible]asing Canadian brookies.

I captured nearly 1400 trout with the trapnets in 1981 and 1982. I recorded lengths on cutthroats and hybrids and took lengths, weights and scale samples from brook trout. The nets allowed me to collect large numbers of fish and release them unharmed. I did sacrifice brook trout caught at the hatchery during the cutthrout fry releases and found no evidence of extensive predation on the newly stocked fish. Certainly a few get eaten, but losses are not heavy.

Resident Henrys Lake brook trout put on about a pound per year. The oldest fish I found was a 6 3/4 pound fish that was six years old. These big trophy brookies are quite rare though; I only found 10 fish out of over 500 that were older than four years.

The Assinica and Temiscamie strains are noted for longevity. Twelve year old Assinicas have been taken in Adirondack Mountain waters by Cornell University biologists. How old they will get in Henrys Lake is anybody's guess, but at the rate they have grown over the first two years, they will soon be in the trophy category. Two year old Assinicas averaged over 15 inches long and one fish was 18 inches long and weighed three pounds. Growth of the Temiscamie strain is similar to that of the Assinica fish. We are encouraged by the results of these plants and the Fish and Game Department will continue the Canadian brook trout program.

I also did a study of the diet of Henrys Lake brook trout and thank all of the anglers who provided me with brook trout stomachs. The number one food item was freshwater shrimp, which made up about 35% of the volume of food in stomachs collected throughout the season. Midge pupae were second in importance, making up about 28% of the seasonal diet. Sculpins were third at 15%. Other important food, in descending order of importance, were: caddis larvae, leeches, plankton and damsel nymphs.

A new graduate student, Dave Cole, is continuing the study of the Canadian brookies throughout their third and fourth years in the lake. Dave will also be looking at the tributaries and the effects of screens on improving natural recruitment of fry.

I have enjoyed the two years I spent at Henrys Lake as a graduate student and creel census clerk and will spend many days there in the future (to check on my brookies with a fly rod). The interest that you sportsmen have in the Henrys Lake fishery has made my job interesting, and your willingness to get involved to help improve the fishery is unique. Thanks!

WORDS FROM MIKE GLENN - Secretary-Treasurer

I hope that you like this type of newsletter, as I feel that it deninitely is interesting to hear about our Henrys Lake from different people.

I must apologize for the late date on the membership cards. Currently our bank account is about $2600. Not too bad considering we gave $5000 to the Idaho Fish & Game Department in September.

I hope all of you will be helping out your foundation by talking about Henrys Lake to others in hopes of an increase in membership and enthusiasm about the progress that has been made thus far.

I hope you will have a good holiday, and you will hear from us again this spring.

Mike