

Fourth Quarter Report  
1985 Steelhead Adipose Fin Removal Project  
Idaho Department of Fish and Game

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Task 2.5.1. All hatchery steelhead in the state of Idaho had their adipose fins surgically removed between September 9 and November 13, 1985. Niagara Springs Hatchery steelhead were clipped from September 9 to September 25. Hagerman National Fish Hatchery fin clipping began on September 30th and ended on October 18th. Fin clipping at Dworshak National Fish Hatchery began on October 1 and ended on November 13th.

Task 2.5.1.1. Steelhead at the hatcheries were crowded up in the raceways then netted into the hopper located at the rear of the clipping trailer. A fish pump was used to load fish into the fin clipping trailer during the last week of clipping at Niagara Springs. The fish have to be carried a long distance from the raceways to the trailer at Niagara Springs Hatchery. This was believed to be a stressful situation so it was remedied by utilizing a fish pump. The other two hatcheries are designed so that the clipping trailers can be parked on the edge of the raceways and thus no fish pump was used at these hatcheries.

Once inside the trailer, all steelhead were anesthetized with MS-222. Fin clippers netted 70-250 fish into the anesthetic trough then waited for anesthetization. After anesthetization was evident, the steelhead were clipped, then placed in the fresh water trough that returned them to the raceways.

The steelhead at Niagara Springs and at Hagerman National had at least 75% of the fin removed on 99.7% of the sample fish observed. The steelhead at Dworshak had at least 75% of the adipose fin removed on 99.33% of the sample fish observed.

Task 2.5.1.2. Four samples of 50 fish were observed for fin clip quality during each clipping shift. The samples were taken at random throughout the shifts. Samples were taken from the clipped fish just before they exited the console to return to the raceways. These same fish were checked for descaling but no significant descaling was observed.

Task 2.5.1.3. The number of fish clipped at Niagara Springs was 2,291,780. At Hagerman 1,836,058 steelhead were clipped. At Dworshak 3,261,429 steelhead were clipped. All three hatcheries had a 1985 combined total of 7,389,271 steelhead clipped.

Fin clip quality sample sizes were 4,642 at Niagara Springs, 3,839 at Hagerman, and 5,701 at Dworshak.

Fin clipping required 1,458 fin clipper man hours and 214 fish netter man hours at Niagara Springs. At Hagerman there were 2,529 fin clipper man hours and 312 fish netter man hours needed to complete the clipping. To clip all the steelhead at Dworshak National Fish Hatchery it took 3,449.5 finclipper man hours and 484.5 fish, netter man hours.

Using only the crews wages, it cost 1.7 cents per steelhead

clipped at Niagara Springs and Hagerman National Fish Hatcheries, and 1.8 cents per steelhead clipped at Dworshak National Fish Hatchery.

Task 2.5.2.1 Niagara Springs had the largest mortality of the three hatcheries that were clipped. There were 10,429 mortalities at Niagara Springs which amounted to 0.50% of the steelhead handled at this hatchery. At Hagerman National there were 512 mortalities which amounted to 0.03% of the steelhead handled. At Dworshak the mortality was 1,833 which amounted to 0.06% of the fish handled.

The majority of the mortalities occurred during crowding of the fish in the raceways. Niagara Springs is the most difficult hatchery for crowding fish. The fish must be crowded upstream in 200 foot raceways. The steelhead fight the crowd racks more at Niagara than at the other two hatcheries. Many of the fish become pinched between the rack and raceway walls. At the other hatcheries the raceways are smaller and are more conducive to crowding.

The fish culturists spent some time in December compiling data from the fin clipping project for the project report.