

## THIRTY-FIRST BIENNIAL REPORT

## FISH AND GAME COMMISSION

Fort Seward Hatchery was one of those selected for the feeding experiments last season. As the report made by Dr. Coleman covered the matter fully, it is necessary only to say that the foods selected proved failures at this station. The superintendent desires to stress particularly the experiments made with salmon offal. It is no doubt a valuable and a cheap food, but the use of it is associated with conditions that it will be hard to eliminate and which render the use of it dangerous unless properly handled. These conditions are, first, that the material unquestionably must be frozen solid immediately after removal from the salmon at the packing house and held in a frozen condition until used at the hatchery; second, some container to be used in shipping must be provided to prevent leakage of fluids while the material is in transportation, otherwise, the transportation companies will refuse to accept it.

On the whole, the weather conditions have been dry during 1928, 1929 and 1930. We have had quite a lot of scattered rain during the winters, but none of the normal continuous downpours as in former years. As a result, the creeks have been below normal in flow. This subnormal flow has further been induced by the fact that forest fires in the watersheds have removed the ground cover and the run-off after rains is unimpeded and rapid, very little of the falling moisture sinking into the ground.

Total number of fish distributed from this station during the biennium:

260,730 Rainbow trout.

2,593,350 Steelhead trout.

100,000 Cutthroat trout.

1,261,880 Silver salmon.

## **PRAIRIE CREEK STATION (Experimental)**

This experimental station was established in the early fall of 1928. No major improvements have been made at this station other than the building of a garage, which was a necessity. Only work that was absolutely necessary for the operation of the station has been done, as we still consider the station in an experimental stage and unproven as to either its continuance or as to its abandonment.

The climatic conditions prevailing during the past two years have been so adverse as to preclude an opinion as to the merits of the location as a potential egg supply. One or two bad breaks in the racks have been repaired.

Information from residents of the district is to the effect that there is a good run of steelhead trout in Prairie Creek about once in five years. We have planted the creek heavily during the past two years in the hope of ultimately building up a regular steelhead run in the creek. If we are able to succeed in this endeavor, it will be very good proof of the plan of planting large numbers of small fish instead of a few large fish. A further study is to be made of the streams of the district with a view of establishing dependable sources of egg supply. Redwood Creek has been under consideration for a number of years as a source of supply of salmon and steelhead eggs, but lack of funds to establish a permanent station have prevented carrying out of plans for this purpose. The United States Fish Commission attempted to establish an egg-collecting station on this stream over thirty years ago, but owing to the small sum of money used in the construction work and the tremendous floods during the period the experiments were carried on, the station was abandoned. With improved methods of trap construction, new roads to available sites, when funds are available this creek should be considered. Redwood Creek is a stream that carries several thousand second-feet of water during flood stages and any work must be of a substantial nature that will stand the high water conditions.



FIG. 17. Taking spawn from a ten-pound Tahoe black-spotted trout. Taylor Creek, El Dorado County. Photo by Joseph H. Sanders.

## TAHOE HATCHERY

The operations at Tahoe station have been carried on to its full capacity. Since the construction of the reservoir and aerating system, the spring water has been greatly improved and the fish are making a much better growth during the same length of time than they did when the hatchery was first built. The improvements during the last biennial period consisted of the installation of a power grinding machine for preparing the food and the purchase of a Dodge screen-side truck for the distribution of fish at the Tahoe and Tallac hatcheries.

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