

### GAME LAW ABSTRACTS <sup>NO</sup>

Game law abstracts for the year 1929-1931 are now available. The outstanding information relating to licenses, districts, seasons, bag limits, protected species and other regulations is presented in concise form. The abstract has been distributed to those handling licenses for the division or may be obtained from law enforcement officials. Sportsmen and anglers are urged to secure copies in the interest of knowing the law.

An abstract poster has also been issued for display in sporting goods stores and public places. The limited edition prevents extensive distribution to individuals.

### STRIPED BASS INTRODUCED IN SALTON SEA <sup>d</sup>

In October, two plantings of striped bass were made in the Salton Sea. The second plant appears to have been made with perfect success. The fish arrived from Tracy, California, after twenty-four hours on the road and one hour later were investigating their new home. A flat-bottomed boat equipped with an airplane motor, airplane propeller and aerial rudder and made to skim over the shallow water with considerable speed, materially aided in getting the bass to the planting grounds with all dispatch.

To guard against the predatory sea birds which haunt the great inland sea, the fish were planted in fairly deep water.

The plants came as the result of an investigation made by Biologist George A. Coleman. Striped bass have never before been introduced into a landlocked sea, but conditions are such that the experiment was believed to be practicable. Those who have experienced the thrill of catching the fish claim it is a bold biter and altogether a wonderful game fish. Robert Hayes, secretary of the El Centro Chamber of Commerce states that lovers of fishing are awaiting with eager anticipation the time when the bass will be of sufficient size and numbers to permit angling. <sup>✓</sup>

### THE MONTANA GRAYLING IN CALIFORNIA

Izaak Walton called the grayling "the flower of fishes." It is just that. The only place in the Union where the grayling is propagated is at Anaconda, Montana, where about fifteen million eggs are taken each year. These fish spawn in May and June. The eggs are placed in hatching jars, such as are used for hatching white fish eggs. They have, however, been hatched with good success in wire baskets of small mesh.

Dr. Treece, superintendent of hatcheries for Montana, writes: "Another difficulty about the propagation of the grayling is the fact that we have never found any form of food for the little fellows, and as a result he must be taken out and planted before the little food sac is absorbed." It was to remedy this condition that research, regarding food for young grayling was inaugurated at Steinhart Aquarium, in Golden Gate Park, San Francisco.

On May 19, 1924, we received at the Steinhart Aquarium about 4000 grayling eggs in eyed condition. They were placed in the hatchery, and by May 30 they were all hatched. As soon as the food sac was absorbed, we began feeding them, trying each of the following: Boiled egg squeezed through a cloth, powdered shrimp, meat juice, sour milk curd, fresh fish ground to powder, liver and beef heart. None of these could be regarded as a success and the death rate mounted rapidly. Within four months, every one of these young grayling were lost.

On June 24, 1929, the Montana Department of Fish and Game sent the aquarium about 30,000 grayling eggs, all of which hatched in fine condition. We at once got in touch with W. H. Shebley and offered to the Division of Fish and Game, about 25,000 of these young grayling for planting in such places in California as he might choose. We suggested that Mirror Lake in the Yosemite Valley as closely approximated the conditions of Georgetown Lake, in Montana, where the eggs were secured. The young grayling were accordingly taken to Mirror Lake by the representatives of the division's fish cultural bureau and planted on July 3, 1929. About one week later a second lot, of perhaps 5000 young were sent to the Mt. Shasta Hatchery for planting in northern California. The remaining fish were retained at the Steinhart Aquarium for experiments in feeding with live food, large quantities of Daphna, Infusoria, and small brine shrimp being used for this purpose, but without success.

The problem of feeding young grayling is still one awaiting solution.—ALVIN SEALE, Superintendent of the Steinhart Aquarium. <sup>NO</sup>

### SALMON BULLETIN PUBLISHED

Fish Bulletin No. 17, "Sacramento-San Joaquin Salmon (*Oncorhynchus tshawytscha*) Fishery of California," by G. H. Clark, is now off the press and available for distribution. It is expected that this publication will be read by many because of the great interest shown in the salmon of California. This report deals with the