



Spirit Lake sportsmen report on quality of fishing. (Left, above) Clark Collins records size of catch made by Matt Carter and Harold Smith. Smith, holding rod is president of local sportsmen's association. (Right) On record sheet are noted size, weight and location of catch, species taken and weather data.

Census Aids Fisheries Program

Details of a study carried on by interested sportsmen during 1948-1950 to evaluate local fishing conditions in Spirit Lake by a statistical method rather than by guesswork are revealed in a creel census report released by Tim Vaughan, north Idaho fisheries biologist.

The first study of its type conducted in Idaho, the fishing census on Spirit lake conducted by sportsmen under the guidance of Vaughan and Dan Embody, consulting statistician for the Idaho fish and game department, has stimulated interest of other groups in the methods used.

Similar creel censuses are now under way on other north Idaho fishing waters such as Twin Lakes and Hayden Lake in Kootenai county and Pend Oreille Lake in Bonner county.

For the Spirit Lake census, a number of representative fishing days were selected in advance at a drawing conducted by the sportsmen and resort owners for a random sampling which included a proper proportion of Sundays, Saturdays and week days. On those days, through the voluntary efforts of the interested group, approximately 95% of the fishermen were checked for size of catch, species

of fish taken and number of hours spent on the lake, over a 15-week period each year.

In addition to providing valuable creel data for the department, the study demonstrated that sportsmen can maintain effort on a voluntary basis when objectives and methods are clear. Most important, statistical methods used convinced local fishermen that fishing in the lake had not gone into a decline. Fishermen observed that decline in numbers of fish taken during the second year of the study was accompanied by a drop in fishing pressure during the same period, with no significant reduction in the quality of the fishing on the lake statistically apparent.

Fishermen averaged 7.3 trout and blueback each per fishing day from Spirit Lake waters during the period covered by the summary.

At Pend Oreille Lake an extensive creel census, to determine over a four year period the variations in fishing results and pressures, and the possible effects of new dams at Albeni Falls and Cabinet Gorge, has been initiated.

Resort owners, fishermen, private industry and game department personnel will combine their

efforts to obtain the necessary information.

As this lake is large, it has been divided into four areas. Each section will be sampled four times each month during the season.

A creel census is being continued this summer on Henrys Lake and Island Park Reservoir on the upper Snake River drainage in eastern Idaho.

The study on these waters is being carried on to determine the effects of a 12 day earlier opening on Henrys Lake in relation to harvest and the number of fishermen utilizing these waters instead of Island Park Reservoir—the population of fish in both waters—and the harvest taken by fishermen during each season.

Preliminary checks opening week show that a portion of the fishing public did change from Island Park to Henrys Lake.

Information compiled from last years census showed 18,444 trout taken from Island Park from June 4 to August 26. These fish weighed 23,977 pounds for an average dressed weight of 1.3 pounds. During the census period 11,358 fishermen spent 46,740 hours in catching 18,444 fish. At Henrys Lake 12,600 fish were caught during the period June 15 to September 6.

FISHES OF IDAHO No. 14

WHITE STURGEON

Acipenser transmontanus
(RICHARDSON)By JAMES C. SIMPSON
Idaho Fish Culturist

The white sturgeon, the largest of fresh-water fishes, is native to the Snake and Kootenai rivers. Its range is from California to Alaska. Prior to the construction of dams on the Columbia and Snake rivers the species was, no doubt, partially anadromous in its habits. In recent years, however, the sturgeon has been forced to spend its entire time in fresh water. It has been suggested that

except that it takes place in spring, usually in May and June. Growth of sturgeon is very slow. It has been suggested that the life expectancy of sturgeon may be in excess of fifty years. Recently, a method for determining the age of sturgeon has been evolved. This method consists of sectioning the first large heavy ray of the pectoral fins and then counting the growth rings by use of magnification.

In 1942, the fish and game department transferred eight male and five female sturgeon from the Snake River at Hammett to Snake River at Burley. It is not known if any survived after transplanting.

The sturgeon met with considerable disfavor among early commercial salmon fishermen because they were continually getting caught in the fishermen's nets.

Due to the low economic value of sturgeon at that time, they were killed and thrown away. During the years from about 1910 to 1943, a substantial commercial sturgeon fishery existed along the Snake River. Some of the flesh and roe found its way to Eastern markets. Since that time it has become popular with the winter and spring sports fishermen. Commercial fishing and the sale of sturgeon meat and roe are now illegal.

The white sturgeon attains a large size. Jordan and Evermann, in their book "American Food and Game Fishes", report one from the Snake River 13 feet long and weighing 1000 pounds. Present-day size is considerably smaller; a fish of 350 pounds is considered large.

In desert mountainous sections of South-central Nevada it is said the Chukar partridge has established itself so well as to be safe from extermination by hunting or existing predators.

In a waterfowl study on Gray's Lake the marsh hawk and mink were chief predators observed affecting young ducklings.

White Sturgeon



the sturgeon in the Kootenai River does not remain in the river throughout the year, but ascends it from Kootenai Lake from March to May; however, documentary evidence is not available to state definitely that such is the case.

The sturgeon is a primitive fish. It has a cartilaginous skeleton instead of a bony skeleton; the mouth is inferior supported by jaws; the tail is heterocercal, which means that the upper lobe is longer than the lower one and encloses the end of the vertebral column. The head is covered with bony plates joined by sutures. There are five widely separated rows of bony shields, each with a sharp spine.

The food of the white sturgeon consists principally of small animals such as molluscs, crustaceans, worms, etc., which are sucked in through the protrusible tube-like mouth. Sturgeon fishermen report that fish remains, principally suckers, are often found among the stomach contents.

Very little is known concerning the spawning habits of sturgeon

JUST FOR KIDS! That's what the waters of John's Creek near Grangeville provide—Fishin' for children under 15 years of age. Posting the creek has been a project of the Grangeville Wildlife Association.

