Pend Oreille Lake Creel Census Shows Large Take During 1951 Season

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Final tabulation of census data reveals that 829,000 kokanee and trout were caught from Pend Oreille Lake during the 1951 season. This total represents fish caught by all types of fishermen, resident, non-resident and commercial. At the present time the resident category includes both commercial and sport fishermen. In a later report, the catches of sport fishermen and commercial fishermen will be separated. A summary of the census statistics is given in table one.

Usual procedure in creel census work involves counting 100% of the catch. The size of Pend Oreille Lake, however, and its 111 miles of rugged shore line made complete daily coverage practically impossible. To solve the problem of labor, cost, and manpower, census operations were set up according to a biometric sampling plan.

The lake shore was divided into four areas as indicated on the map. A complete count of all fish caught within a particular area was made five times a month for each area. Hence, census operations were conducted somewhere on the lake 20 days each month. The sampling plan required that days and areas be selected by a random process with two restrictions. First, counting was done at only one area on any one day, and second, one Saturday, one Sunday and three week days were included for each area. These restrictions were necessary for technical reasons. Data collected consisted of catch by species and time spent angling.

The technical purpose of the census was to determine the mean daily catch of fish from the lake. By multiplying the mean daily catch by the total number of days in the season, the total catch was obtained.

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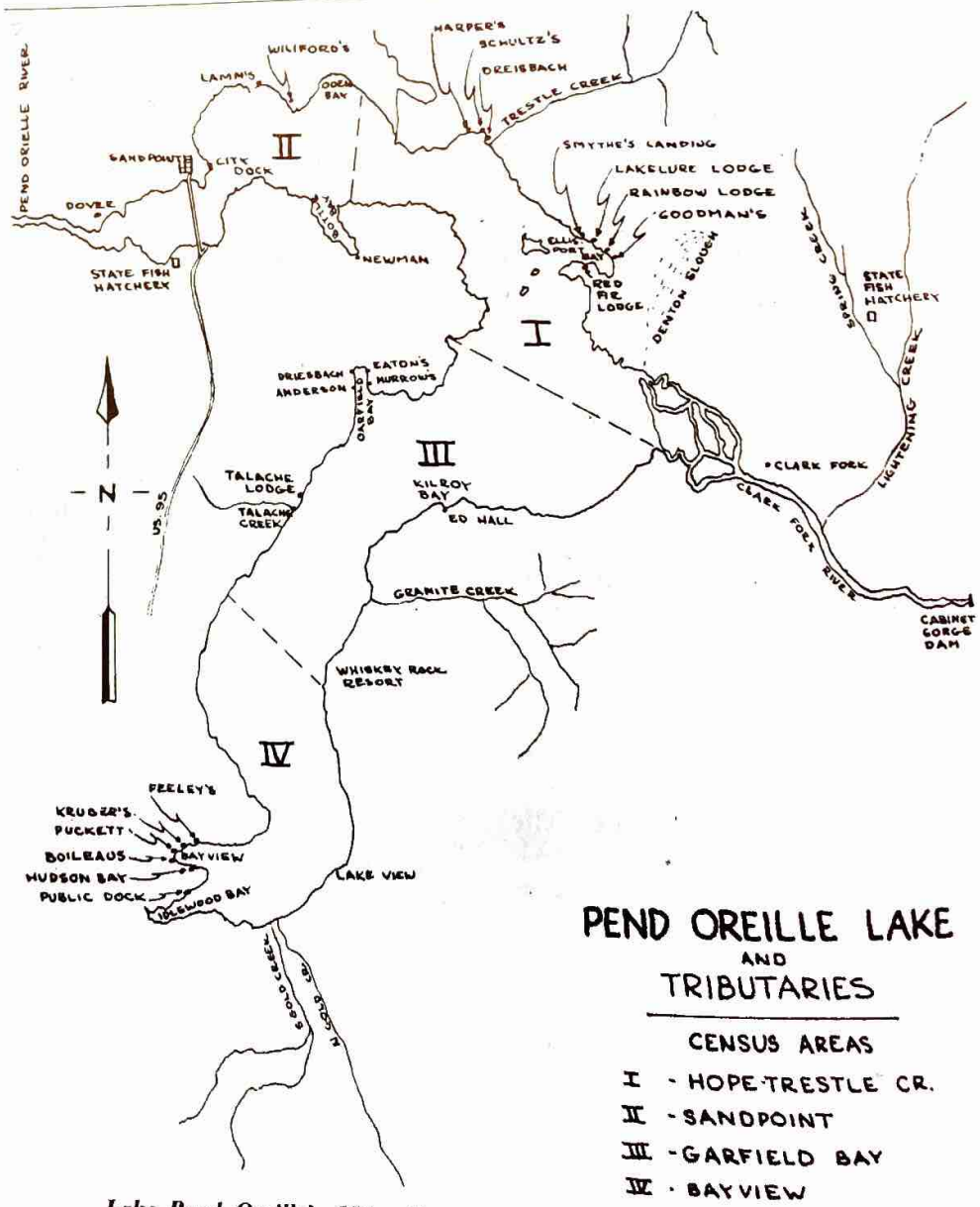
Total Catch of Kokanee and Trout

	Fishermen	Hours of Effort	Kokanee and Trout Caught	Fish per Hour	Catch per Fisherman
Resident	33,200	176,000	521,000	3.0	16
Non-Resident	27,000	155,000	308,000	2.0	11
Total	60,200	331,000	829,000	2.5	14

Table 1



Lake Pend Oreille's 111 miles of shoreline was divided into four districts, as shown on this map, to facilitate creel census work. Instead of counting every fish caught, an impossible task with limited personnel on this giant lake, the fisherman's take was computed from a series of scientific samplings.

FISHES OF IDAHO NO. 18

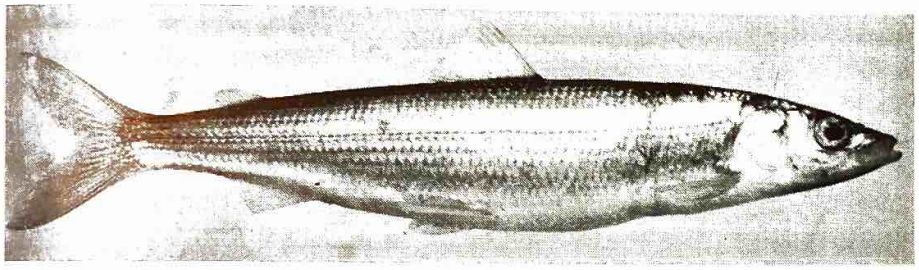
PEAKNOSE CISCO

Leucichthys gemmifer Snyder

By JAMES C. SIMPSON

Idaho Fish Culturist

The peaknose cisco, a member of the whitefish family, is known only from Bear Lake and is also the only cisco occurring naturally in the western United States. Although this fish was known to the residents of Bear Lake Valley for many years, it was not until 1919 that it was described as a new species by John O. Snyder. From the time the early settlers arrived in Bear Lake Valley until the early 1920's when gill netting and setlines were prohibited by legislative action by the states of Utah and Idaho, there was a small but substantial commercial peaknose fishery on Bear Lake. It is reported that the peaknose cisco and the Bear Lake whitefish, which is about the same in size, were at one time offered in the markets of Montpelier for ten cents a dozen. It also was used as bait on setlines which were used to catch the Utah cutthroat trout.



The Peaknose Cisco . . .

Since the cessation of commercial fishing, very few ciscos have been taken. However, in 1951 both Utah and Idaho opened Bear Lake to winter fishing, which should encourage angling for them. Fishermen find it a very desirable food fish for its flesh is sweet and tasty.

The peaknose cisco is a small fish seldom exceeding eight inches in length. It is easily recognized by its long slender body and long pointed snout. It is grayish-green to grayish-blue on the back, silvery on the sides and white below. The scales are large, numbering 71-77 along the lateral line. Like other members of the whitefish family, the mouth is small.

Spawning takes place during the latter part of January and early February at depths of 35 to 90 feet. A 6-inch female will produce approximately 2500 eggs. Both males and females develop pearly nodules on the scales at spawning time.

In addition to being a good food fish, the peaknose is a good forage fish for the mackinaw trout, which is also found in Bear Lake. On October 17, 1950, a Fish and Game Department field party, checking mackinaw spawning areas, caught a 14-pound mackinaw with four full-grown ciscos in its stomach. Fishermen, catching mackinaw during the month of May, report ciscos common in the diet of mackinaw. Since its diet consists of small crustaceae and it inhabits deep water, it is in competition only to a small degree with trout.

The youth pheasant chick program offered by the Fish and Game Department for the past two years will be discontinued during 1952. Under this program the department furnished day-old pheasant chicks to interested cooperators sponsored by the FFA, 4-H, Boy Scouts, and sportsmen groups or similar organizations. When the pheasants were 8-10 weeks old the game department picked up and released the birds and paid $1 to the youngsters for each one received. There were 7,362 pheasants returned under this program in 1951.

Due to a limited budget it will not be possible for the department to carry out such a program this year. Day-old pheasant chicks will be furnished only to organizations who desire to rear and release the birds as a club project. The department will not deliver birds to individuals or pay for their return as in past years.

Whitefish Offer Excellent Winter Sports Fishing

Whitefish continue to be the leading winter game fish in many Idaho waters. Frozen lakes are dotted with heated tents, shacks, and shelters where fishermen huddle companionably together beside holes in the ice. It is a colder sport along streams and other open waters, but such popular areas as the South Fork of the Payette river often attract hundreds of fishermen on a good day.

Angling for whitefish requires the simplest of equipment. The ice fisherman does not even use a rod, but only a hand line. The most popular bait is the white grub, or maggot. Some fishermen use the light brown nymphs of the stonefly (helgrammites); small pale salmon eggs, or light colored artificial flies, but these are less effective. In both stream and lake fishing, the rigging should carry weight enough to drift the hook near the bottom, and a 1-to-4-pound-test leader is usually preferred. Snelled hooks, size 12 to 16, are recommended.

Probably the most popular way of preparing whitefish, among those who will take the trouble, is smoking. Properly handled, smoked whitefish are considered a real delicacy. By one method, the fish are packed in an earthenware or enamel container, with half to one pound of salt for ten pounds of fish well distributed through the layers. Then the container is filled with salt water, mixed in a proportion of about two pounds of salt to a gallon of water.

After about 10 hours, the fish are rinsed, dried, and placed in the smokehouse over a fire of orchard wood or other hardwood. Most smokers recommend a 3 to 6 hour curing over a light smoke, with the temperature in the house at about 80 degrees F. Then the fires are built up and the fish are cooked in a dense smoke at about 170 degrees for one or two hours. Timing depends on the size of the fish and the flavor desired.

Record Number Kamloop Eggs Taken in 1952

Kamloops brood stock at the Clark Fork hatchery is producing a bumper crop of eggs this year, according to a report from Tim Vaughan, fisheries biologist. Egg-taking crews had passed the 300,000 mark by the end of February, and the total number was expected to pass 500,000 perhaps even approach 1,000,000, when the work is finished.

Vaughan said that warm weather early in February brought the stock to spawning condition weeks earlier than usual. The young fish are expected to make unusually good growth during summer because of this early start.

Planting schedules call for 250,000 of this year's hatch to be held over until next spring, the rest being released in Lake Pend Oreille this fall.

Since 1947, Kamloops plantings have been steadily on the upgrade, and this is reflected in the increased success of fishermen on Pend Oreille in 1951. The majority of Kamloops trout boated last year were four and five year old fish, apparently from 1947 and 1948 plantings, with a few three year olds also reported. Experience at Pend Oreille indicates that these trout grow at a moderate rate until they are three years old, weighing three to five pounds, when they begin to feed on kokanee (blueback salmon). This speeds up their growth and they put on 6 or 8 pounds a year.

Records show that Kamloops fishing success has been in direct proportion to plantings made. In 1942, hopeful anglers watched 20,000 infant Kamloops take to the lake, and in 1943 the number was 60,000. After this, no more eggs could be obtained from Canada, and the fish and game department was unable to develop sufficient fertile brood stock to keep up the plantings.

The fishing records parallel this. The fish planted in 1942 were over a year old. In 1946, when they were five years old, they began making fishing news from coast to coast. The next season, 1947, was fair, but 1948 was a flop. Rumors flew. Disappointed anglers began to wonder whether the whole thing hadn't been just a rosy dream. They were still discouraged in 1949 and 1950. Then, in 1951, as the modest 1947 planting reached catching age, the giants began to show up again.

Hatchery men prepare to separate "ripe" spawners from "green" ones at the Clark Fork hatchery spawning pens. Kamloops brood stock are reared at this station. (Photo courtesy Sandpoint News-Bulletin)

Gene Clark, (left) hatchery superintendent, and Maurice Harding take Kamloops spawn. (Photo courtesy Sandpoint News-Bulletin)

The development of good, sound, productive brood stock at the hatchery, plus additional knowledge of the peculiarities of this particular trout, has apparently put the Kamloops in Pend Oreille to stay. The fish still do not reproduce naturally in sufficient numbers to replenish the lake, though some do spawn in streams around Pend Oreille. Biologists point out that the Kamloops usually do not spawn until the age of four—just about the same time they reach good catching size. They believe the Kamloops spawn only in alternate years, which also slows their reproduction rate.

Hatchery men report a difference in temperament between the Kamloops and ordinary rainbow trout. They say the Kamloops do not become accustomed to men moving around the rearing ponds as rainbow do, and they remain generally "spookier." They seem to have a shorter life span, since the department has no record of a Kamloops over seven years old.