## Institute for Fisheries Research Report Number 4

March 19, 1930

## PROVISIONAL REPORT ON THE SMELT SITUATION IN LAKE CHARLEVOIX

By Carl L. Hubbs

The news of the establishment of smelt in Lake Charlevoix and of runs in tributary streams in 1929, has called for a brief investigation. Consequently, Professor C. W. Creaser, of the College of the City of Detroit, who has closely followed the progress of the smelt in Michigan, visited Charlevoix County to undertake this preliminary examination on March 13 to 15, 1930, on behalf of the Institute for Fisheries Research.

Professor Creaser has reported to us his findings, which we transmit to the Department now, because of the fact that the 1930 run is already underway (first run, night of March 17). Professor Creaser will return to investigate the run in the tributaries of Lake Charlevoix and in various other streams, including those tributary to Traverse Bay and Lake Michigan. We shall later prepare a fuller report covering all this work.

The smelt situation in Lake Charlevoix differs from that in Crystal Lake in a very important respect; namely, the greater number of streams available for spawning runs. While Crystal Lake has only two spawning streams of any size, Lake Charlevoix has ten important streams, not to mention many unnamed trickles which run into the lake, and which are also available for small runs.

The ten named streams available for smelt runs, with a statement of available spawning area, are:

- Boyne River (a spawning run started on this stream March 17, 1930) a wide stream available for run for three miles. (Open to Pearl St.).
- 2. Porter Creek (a spawning run on March 28, 1929) available to the Mill dam at the road, a distance of 750 feet. (Open to Dam).
- 3. <u>Jordan River</u> open for many miles; has two tributaries, Brown Creek, which is open to State road M-66, where there is a small dam, and Deer Creek, open to power dam 1/2 mile from outlet into Jordan River.
- 4. Monroe Creek unobstructed throughout its length of several miles.
- 5. <u>Miller Creek</u> available to the main road, a distance of about 1/4 mile.
- 6. <u>Loeb Creek</u> probably available only to the road, a distance of 1/2 to 3/4 mile.
- 7. Barker Creek a small stream open for more than a mile.
- 8. Stover Creek (a run on March 28, 1929): an old dam obstructs passage of smelt 450 feet from the lake. There may be no objection to clearing this out. To do so would benefit the run.
- 9. Horton Creek a wide stream available toward the road for about 1/4 mile (to a rustic dam). (Open to dam).
- 10. Boylans Creek a small stream open for a few feet.

The conditions for a multiplication of smelt in Charlevoix Lake are very favorable. Numerous runs will no doubt develop. There may be a lesser concentration of spawning population than in Cold Creek at Beulah because of the larger number of spawning streams.

We point out this circumstance, with the obvious conclusion that a careful supervision of the fishing would present greater difficulties than at Crystal Lake, and would call for a larger force of officers.

No doubt winter fishing for smelt will become more important. Doctor Creaser found much concern locally over the question of the method of controlling or licensing of such fishing, when done for the market.

Signed by Carl L. Hubbs, Director