Harrison River Fishery Assessment (Creel) Survey

September 22 – December 2, 2001

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Regulations

Harrison River was open from the outlet of Harrison Lake to the confluence with the Fraser River. The recreational fishery was closed at night, from one hour after sunset to one hour before sunrise. Coho retention of 2 hatchery fish per day (only 2 can be over 35 cm) was permitted from September 1 to March 31. Chum retention of 2 fish per day was permitted from April 1 to March 31. No retention of chinook was permitted from April 1-March 31.

Study Area

The Harrison River study area extended from the outlet of the Harrison River, upstream to the outlet of Harrison Lake.

Survey Methods

The Harrison River recreational fishery survey began on September 18, 2001.

The surveyors worked all weekends and holidays with rotating days off during the week. They worked one of two shifts (morning or afternoon) that spanned the entire daylight period. Shifts were randomly assigned to each survey day.

The surveyors conducted angler interviews at their survey sites to obtain the following information: where the angler was fishing, party size, length of angling trip, when their fishing lines were in the water, how much longer they intend to fish, target species, gear used, total catch retained, total catch released. Interviews were used to determine catch-per-unit effort (CPUE), release-per-unit effort (RPUE), and to summarize the angler characteristics listed above.

Daily effort is calculated using a combination of interview data, hourly rod counts conducted at the survey sites, and overflight rod counts of the survey area (conducted twice per week: one weekend and one weekday). Using total effort, CPUE and RPUE is expanded to determine catch and release numbers by species for the entire study area. Such analyses are documented in several DFO publications (Schubert 1992; Schubert 1995)



Most anglers accessed the Harrison River by boat, launching at Kilby Beach and at the Island 22 boat launch on the Fraser River. Shore-based angling on the Harrison River also occurred upstream and downstream of the Kilby boat launch.

Two surveyors assessed the Harrison River recreational fishery. One surveyor was stationed at the Island 22 boat launch where they collected interviews from anglers returning by boat to this boat launch. Only interviews from anglers fishing on the Harrison River were included in the Harrison analyses. A second surveyor was stationed at the Kilby boat launch. At this site the surveyor spent the largest proportion of their day collecting interviews from anglers returning by boat to this boat launch. They also spent a smaller proportion of their day conducting a roving (incomplete) interview survey above and below the boat launch of shore-based anglers. The surveyor began conducting complete hourly rod counts on September 18. Hourly rod counts were conducted at the outlet of the Harrison River where the largest concentration of anglers occurred. The Instantaneous effort overflight rod count began on September 18 and covered the entire survey area.

For analyses the data were stratified into month and day type (weekend and weekday). Data were stored and analyzed using excel.

References

Schubert, N.D. 1992. Angler Effort and Catch in the 1985-1988 Lower Fraser River Sport Fishery. Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2170.

Schubert, N.D. 1995. Angler Effort and Catch in Four Fraser River Sport Fisheries, 1991. Canadian Manuscript Report of Fisheries and Aquatic Sciences 2267.

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