



## **Fraser River Recreational Fishery Assessment (Creel Survey)** **October 15 to November 30, 2002**

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### **Regulations**

#### **Non-Tidal Waters: CPR Bridge at Mission upstream to the Alexandra Bridge** **October 12-December 31, 2002**

- **Chinook:** 4 fish per day, only one over 50 cm
- **Coho:** 2 hatchery fish per day over 25 cm
- **Chum:** 2 fish per day

#### **Tidal Waters: downstream of the CPR Bridge at Mission** **October 9-December 31, 2002**

- **Chinook:** 4 fish per day over 30 cm, only one over 50 cm
- **Coho:** 2 hatchery fish per day over 30 cm, only 1 over 50 cm
- **Chum:** 4 fish per day over 30 cm

### **Study Area**

The Fraser River study area extends from the Port Mann Bridge (Vancouver) to the outlet of the Harrison River. Angling activity above the outlet of the Harrison River and below the Port Mann Bridge has been historically low.

### **Survey Methods**

The Fraser River recreational fishery survey began on October 15, 2002.

The surveyors worked all weekends and holidays with rotating days off during the week. One of two shifts (morning or afternoon) that spanned the entire daylight period were worked. 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, length of angling trip, how much longer they

intend to fish, target species, gear used, total catch retained, total catch released. Further, if permitted by the angler, the surveyors inspected the catch to determine whether the angler's species identification was correct. For coho and chinook, if the adipose fin was missing the surveyors would retain the head. Heads were later checked at the hatchery for CWT presence or absence and if a CWT was present these heads were retained and submitted for analyses. 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 instantaneous effort rod counts of the survey area (conducted twice per week: one weekend and one weekday flight). 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)

In October and November, one surveyor was stationed at the Island 22 boat launch and a second surveyor was stationed on alternate survey days at either the Mission Bridge or Edgewater Bar. Boat-anglers were dispersed throughout the study area. Shore-anglers were concentrated at the following sites: Patullo Bridge, Edgewater Bar, Duncan Bar, and the Port-Mann Bridge. The study area was divided into two regions: the outlet of the Fraser River up to and including the Mission Bridge and above the Mission Bridge to the Agassiz-Rosedale Bridge. Edgewater bar and Mission Bridge sites were used to obtain both hourly rod counts (Fraser River daily effort profiles), and interviews (CPUE and RPUE) below and including Mission Bridge. Two shifts, a morning and afternoon shift, were randomly assigned to weekend and weekdays for this site. At Island 22, interviews were obtained from anglers (CPUE and RPUE) above Mission Bridge; this site did not provide a sufficient view of angling effort to construct a daily effort profile. Instead, Edgewater Bar and Mission Bridge daily effort profiles were used to also calculate above Mission Bridge (Island 22) results.

For October and November analyses, data were blocked by day type (weekend and weekday) and region (below Mission Bridge and above Mission Bridge). Data were stored and analyzed using DPA software. The data were verified in three steps. First, all field data sheets were examined for compliance with study procedures by the supervising technician and/or biologist. Second, during data entry, the data entry program performed 31 automatic error checks, including duplication detection, code validity, and range and consistency verification. Third, after data entry was complete, all data were imported into an excel file for verification with the field data sheets; all data were error checked twice by two different individuals (generally the supervising technician and data entry clerk).

## 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 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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