Nicomen Slough Fishery Assessment (Creel) Survey

October 2 - November 30, 2002

Prepared by: Sue C.H. Grant, M.Sc.
Biologist, Chum Salmon and Fishery Assessments

Stock Assessment, Lower Fraser Area
Fisheries and Oceans Canada

Regulations

Nicomen Slough is open from the confluence of Siddle (Bell's) creek downstream to the Fraser River. Coho retention of 4 hatchery fish per day (only 2 can be over 35 cm) is permitted from April 1 to March 31. Chum retention of 2 fish per day is permitted from April 1 to March 31. On Norrish (Suicide) Creek, coho retention of 4 hatchery coho per day (only 2 can be over 35 cm) is permitted from April 1 to March 31.

Study Area

The Nicomen Slough-Norrish Creek study area extends from the mouth of the Nicomen Slough to its confluence with Norrish Creek and up Norrish Creek to a point approximately 200 metres upstream of the railway bridge.

Survey Methods

The Nicomen Slough/Norrish Creek recreational fishery survey began on October 1, 2002.

The surveyor 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 surveyor 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. Further, if permitted by the angler, the surveyor 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 wand the fish to determine if the fish contained a coded wire tag (CWT) in their head, and if they did contain a CWT, the surveyor would retain these heads for the DFO Mark

Recovery Program (MRP) and DFO Stock Assessment. 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 drive through of the entire system). 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)

October

In October, the boat launch located at the end of River Road was used by anglers to access the Nicomen Slough and other systems by boat. Shore-based angling on the Nicomen Slough was concentrated at the boat launch and along River Road south of the Lougheed Highway Bridge (Hwy #7). Only limited angling occurred in the upper parts of the Nicomen Slough (above the Highway bridge) or on Norrish Creek.

One surveyor assessed the Nicomen Slough/Norrish Creek recreational fishery. The surveyor was stationed at the boat launch for the majority of the survey day since most of the angling effort (shore- and boat-based) could be captured at this site. Although interviews were obtained from boat-based anglers returning from other systems, these were excluded from the Nicomen analyses. The surveyor spent approximately 20 minutes of each hour of their survey day collecting incomplete interviews from anglers fishing from shore along River Road.

November

Until mid-November, interviews were conducted similar to the month of October. After mid-November, the surveyor started spending a proportion of their daily interview time in locations that also included above the highway bridge up to the hatchery. Most interview time was allocated to Norrish Creek, near the hatchery, where most angling activity occurred.

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.

Acknowledgements

Technical and data management oversight was provided by J. Mahoney. Technical support was provided by D.Sherwood. Data management and entry was provided by, respectively, T. Cone and P. Lam. Technical assistance and study design input was provided by L. Kalnin, and K. Peters. Study design and analyses input and advice was provided by N. Schubert.

Canada