

Indian Food Fishery

There are approximately 2,500 Registered Indians living in the Municipalities of Terrace and Hazelton, and the nine Reservations in this Sub-District.

In 1972, 121 Indian Permits were issued for domestic fishing, a decrease of 33 from 1971.

For most of the fishing season, May until the end of October, fishing was restricted to 4 days per week. On the Lower Skeena, Cedarvale downstream to the Khyex River, fishing was permitted from 6:00 P.M. Friday until 6:00 P.M. Tuesday. On the Upper Section of the river, upstream from Cedarvale, fishing was permitted from 6:00 P.M. Sunday till 6:00 P.M. Thursday.

During the peak of the pink salmon run further restrictions were put into effect to protect this species. During the period, August 1st till Sept. 1st, fishing was restricted to 1 day per week on the portion of the Skeena from Cedarvale downstream to the Khyex River. On the Upper Skeena, upstream from Cedarvale, fishing was restricted to 1 day per week, during the period August 27th until Sept. 10th.

Effective August 26th fishing was closed for the remainder of the season on the portion of the Skeena from the Hydro Line two miles west of Terrace downstream to the Khyex River.

The purpose of these restrictions was to minimize needless damage to pink and chum stocks. If fishing is permitted during the pink run, large numbers of this species are taken incidentally while fishing for sockeye, and discarded. A complete waste of a valuable resource.

At the request of the Councils from the Kalum and Kitselas Bands the length restriction on set nets was raised from 10 to 15 fathoms.

In addition to an increase in the length of set nets, they requested that drift net permits be issued to members of the two Terrace Bands. The reason for the request being; during the past few years the number of permits issued for the Terrace Area has increased to such an extent that there are not enough locations suitable for set nets to accommodate all the permit holders. This is due mainly to an influx of Indians from outside the Skeena Area. A few drift net permits were issued for the Kitwanga Area.

With the exception of a small fishery carried on by the Kitwancool Indians on the Kitwanga River and Kitwancool Creek, Indian Permit fishing was restricted to the Main Stem Skeena. Most of the fish taken by the Kitwancool Band was taken from the Skeena River.

The following is resume of the catch figures for the Indian Food Fishery in the Terrace-Lakelse, Sub-District for the 5 year period 1968 till 1972.

<u>Year</u>	<u>Sockeye</u>	<u>Cohoe</u>	<u>Pinks</u>	<u>Chums</u>	<u>Springs</u>	<u>Steelhead</u>
1968	10,353	2,492	1,212	190	1,124	717
1969	13,741	1,307	1,203	23	845	680
1970	25,100	1,700	21,000	300	2,425	700
1971	42,550	4,450	11,800	800	2,260	850
1972	19,175	1,050	4,900	400	900	725

The large decrease in the 1972 sockeye and spring catch is due to the Unfavorable water conditions that prevailed on the Skeena River during July and early August. During this period water levels were well above normal. High water combined with the resultant floating debris, made fishing difficult, and at times impossible.

Sport Fishing

Salmon

During the 1972 season approximately 200 adult salmon, and 300 jack salmon were taken by anglers from the Main Stem Skeena and its tributaries, between Kwinitsa and Kispiox. A decrease of approximately 50% from the normal catch for the Terrace-Lakelse, Sub-District.

This decrease was due to extremely unfavorable/high, turbid/ water conditions that prevailed on the Skeena, and most of its tributaries during June, July and early August.

It also appears that fishing effort, particularly by non-residents was down from previous years. Many of the tourists that would normally spend a week or ten days fishing on the Skeena, left soon after arrival, when it became apparent that water conditions were not conducive to productive fishing.

Coho

Approximately 2,000 coho were taken by anglers from the Main Stem Skeena, and its tributaries between Kwinitsa and Kispiox.

The catch of this species was higher than normal. This was due mainly to heavy fishing effort combined with favorable water conditions during late September and October.

An estimated 900 coho were taken from the Lakelse River during the period September 20th till November 15th. Other productive streams were the Gitnadoix and the Zymoetz (Copper) River.

Catches were below normal on the Kasiks and Kispiox River. Normally both these streams are good coho producers.

Steelhead

Overall angling success on this species during 1972 was average. Good catches were realized on the Kalum, Lakelse, Zymoetz, Kitwanga and Main Stem Skeena.

The following is a summary of catches of this species for the main steelhead producing streams in this area. This information was obtained from the local Provincial Fish & Wildlife Biologist. These figures were arrived at by a computer using information from steelhead punch cards as a basis.

Lakelse-- 342	Kispiox --- 756	Kitwanga --- 74	Kalum--- 381
Zymoetz (Copper) -- 1352	Main Stem Skeena ---- 600		
Total---3431			

Spawning Summary

Sockeye

The total estimated escapement of this species to the tributaries of the Lower Skeena approximately 15,16,000 was down 50% from the main brood year return of 30,000.

For the past five years there has been a steady decline in the return of this species to the sockeye producing tributaries of the Lower Skeena/Gitnadoix, Kitwanga, Lakelse and Zymoetz River.

Coho

The total estimated escapement of this species to the tributaries of the Skeena, Kwinitsa to Kispiox, was 55-60,000. An increase of 25% from the brood year return of 40-45,000 fish.

The coho escapement to the Lakelse and Kasiks River, two of the main producers in this area was down from 1969.

The increase in the total can be attributed to better than average returns to such streams as the Kalum, Gitnadoix, Exstew and Exchamsiks.

Pinks

The 1972 pink return to the Lower Main Stem Skeena and its tributaries was estimated at 2,092,000. Approximately triple the 1970 escapement of 710,000.

The following is a comparison of the brood year stock and the 1972 escapement to the major pink producing streams in this area.

	1970	1972		1970	1972
Lakelse River	500,000	830,000	Scotia River	8,000	20,000
Kitwanja River	216,000	175,000	Main Stem Skeena	20,000	1,000,000
Kispiox River	5,000	15,000			

The escapement to the Main Stem Skeena was the largest for many years. Unfortunately these fish entered the river and spawned at a time when the water level was very high. In October the water level on the Skeena dropped 5 to 6 feet exposing large areas of spawning beds. As a result at least 50% of the spawn was lost.

The heaviest concentration of spawning was on the 22 mile long section between Selra Island and the Exstew River. Smaller concentrations occurred at Shanes and Raco.

The return to most minor pink producing tributaries was well above average and the brood year stock.

The average size of the 1972 spawners was well below normal.

Springs

The total estimated escapement of springs to the tributaries of the Lower Skeena was 6-7,000.

The return to the Lower Kalum System was approximately 3,000. The number of spawners returning to this stream, the major producer in the Terrace Area, has declined steadily for the past ten years.

The escapement to the minor spring producing streams on the Lower Skeena / Gitnadoix, Kasiks, Exchamsiks, Exstew, Lakelse, Eymoeitz River / was average, and comparable to the main cycle year return.

Chums

The chum escapement, an estimated 9-10,000, was well above average, and the main cycle year return. A normal return of this species to the tributaries of the Lower Skeena seldom exceeds 3,000.

A better than average return to Andeside Slough, Gitnadoix and Kispiox River accounted for most of this increase.

The large number of spawning chums taken in the Indian Food Fishery at the Raco Bar indicated heavier than normal spawning in that area.

Steelhead

The catch per unit of effort in both the Indian Food Fishery and the Sport Fishery indicated a better than average return of this species to the Skeena System.

General

Generally favorable water levels and weather conditions prevailed from the start of spawning late in August until March 1973.

The one notable exception was the rapid drop in the water level on the Main Stem Skeena immediately after an exceptionally heavy pink spawning in late September. This fluctuation obviously had a considerable adverse affect on pink spawn survival on this particular stream.

During the late autumn and winter months water levels on the Skeena and it's tributaries, while higher than normal, were stable.

Stable water levels combined with higher than normal temperatures, and an adequate snow cover should be reflected by a good fry crop in the spring of 1973.

	<u>Snowfall</u>	<u>Precipitation</u> <u>Water Content</u>	<u>temperatures</u>		
			<u>High</u>	<u>Low</u>	<u>Mean</u>
January	94.5	6.47	37	-9	14.9
February	92.4	9.07	33	1	23.3
March	27.4	5.07	49	9	33.1
April	19.8	5.0	52	23	36.4
May		1.0	73	30	49.8
June		2.29	80	39	53.5
July		1.05	90	33	61.5
August		2.04	83	44	61.1
September	.1	2.46	83	30	53.7
October	5.52	5.64	53	25	41.9
November	8.8	8.60	49	27	37.1
December	47.3	5.56	33	3	22.3

Log Salvage

No log salvage carried out in this Sub-District during 1972.

Herring

Not applicable to this Sub-District.

Environment, Multiple Water Use

The following is a resume of the various industries and human activities in this Sub-District outlining their relationship to water resources and pollution.

Logging and Lumbering

Pollution attributable to this industry is not a serious problem in this Sub-District.

In 1972 25 logging inspections were carried out. In 2 cases a small amount of logging debris had been placed in a stream. In each case a verbal warning was sufficient to effect a clean up. In 1972, the first time for several years, it was not necessary to carry out any prosecutions for pollution of waters frequented by fish.

Agriculture and Ranching

Farming and ranching in the Skeena Valley is limited by the small amount of arable land suitable for these purposes.

These activities are confined to the Kalum and Kispiox Valleys, and the Skeena Valley between Terrace and Hazelton.

Farming is confined mainly to raising fodder crops for cattle, and does not require irrigation.

Obstructions and Stream Diversions

Beaver dams are a reoccurring problem in this Sub-District. Mainly on the tributaries of the Kispiox River. Occasionally on the tributaries of the Gitnadoix, Kalum and Lakelse River.

Coho, and to a smaller extent sockeye are the species affected by beaver dams.

The following is a resume of obstruction clearance carried out in this Sub-District during the year.

<u>Name of Stream</u>	<u>Obstruction Removed</u>	
Skunsnat Creek	3 beaver dams	2 man days
McQueen Creek	4 beaver dams	3 man days

This work was carried out by local Fisheries personnel, and a licenced blaster, Mr. W. Southgate a stream Clearance Technician.

Water Licence, Floor Mining Applications

During 1972 a total of 10 Water Licence applications, and 2 Floor Mining applications were processed in this Sub-District. All water licence applications were for domestic purposes.

An estimated 3 man days were spent checking out these applications.

Logging Operations

The logging industry and related service industries are the dominate economic factor in this Sub-District.

In 1972 approximately 1375 persons were employed in the logging and lumbering industry in the Skeena River Valley.

The production of lumber, pulp logs and cedar poles totaled 65,000,000 cubic feet.

Approximately 7,700 acres were logged off on the Skeena River Watershed.

Enforcement

During 1972 a total of 5 prosecutions were carried out for violations of the Fisheries Act, and the British Columbia Fishery Regulations.

The following is a breakdown of the various types of offences;

Sport Fishing -----	I
Violations of Section 32 of the B.C. Regs. -----	I
Indian Food Fishery	
Illegal net fishing in Non-tidal Waters -----	2
Obstructing a Fishery Officer -----	I

In addition 2 gill nets that were being used illegally were siezed from A Person or Persons Unknown.

A total of \$550.00 in fines was levied by the court for the offences listed above.

Little difficulty was encountered enforcing the various regulations pertaining to the Indian Food Fishery/closed times, amount of gear etc./only one prosecution for this type of offence was necessary during the past year.

The number of fish/spring and sockeye salmon/ taken legally in the Indian Food Fishery, and illegally by poachers in 1972 was down considerably from previous years.

This was due to the extremely adverse water conditions that prevailed on the Skeena River during July and August.

Consequently the number of fish entering the illicit market was down considerably from previous years. However it was apparent that salmon taken in Non-tidal waters were being sold locally, and that an appreciable amount was being transported out of the area and being sold to the canneries at Prince Rupert, or in the Smithers and Burns Lake Area.

It was also apparent that the people involved in the illicit fish trade were employing highly developed techniques for transporting and disposing of fish.

Equipment such as unmarked cars and porta-mobile radios were rented and used in an attempt to apprehend persons involved in illicit fish trafficking. It soon became apparent that the personnel available /short term guardians/ did not have the expertise necessary to be of much assistance in this legally complicated type of enforcement, unless accompanied by a Fishery Officer.

Carefully selected Indians, hired locally, can be and are of considerable assistance in enforcing sport fishing and Indian food fishery regulations. However, their value in apprehending illicit fish traffickers, is limited. It is apparent that highly trained Fishery officers are necessary for this type of work.

Predators

Sea Lions-Not applicable to this Sub-District.

Seals-Hair seals enter the Skeena River Estuary in May and June to have their pups. While on occasion strays go as far inland as Babine Lake, large concentrations are seldom seen upstream from the Khyex River.

While it is impossible to accurately estimate the extent of predation on Skeena River salmon by seals, it is no doubt considerable.

Bears (Grizzly, Black)-There is no evidence that either of these species are a problem in this area.

Grayfish - Not applicable to this Sub-District.

Killer Whales - Not applicable to this Sub-District.

Others (Meransers)-There are a few mergansers in this area, but not enough to be considered a problem.

Administration

Staff

Fishery Officers - Morris E. Logart-Permanent duty in the Terrace-Lakelse, Sub-District.

Patrolmen -The following patrolmen were employed in this Sub-District during 1972.

Ben Holton- June 19th till July 1st-Stationed at Terrace.

Delcourt Parent - June 19th till October 21st-Stationed at Hazelton.

Morris J. Logier - July 4th till November 4th-Stationed at Terrace.

Equipment

Departmental Vehicle -A 1970 model-D1100-4 wheel drive International Travelall is in charge to this station. It has 36,000 miles on it. While this vehicle has been generally satisfactory, it has required extensive repairs during the past few months, and is becoming very expensive to operate. It should be replaced in 1974.

River Boat - An 18 foot Valco river boat was obtained in May 1972. It proved to be very satisfactory both on the Main Stem Skeena, and shallow tributary Streams.

Outboard Motors - There are 6 outboard motors on charge to this Sub-District.

I-3H.P. Johnson -----I 5.5 Evinrude-----I-9.6 Johnson -----I-9.8 Mercury

I-65 H.P. Mercury ---- I-50 H.P. Mercury.

Morris E. Bogart
Fishery Officer