

3232 Emerson Ave.
Terrace B.C.
January 23rd, 1970

Mr. J. Connor
District Conservation Officer
Prince Rupert B.C.

Illegal Fishing and Trafficing in Salmon in the Terrace-Lakelse, Sub-District

During the past summer/my first summer as Sub-District Officer at Terrace/it became increasingly obvious that illegal trafficking in Skeena River salmon was being carried on, on a very large scale.

Figures for the Indian food fishery for this Sub-District have been arrived at by interviewing permit holders. During the past ten years catch figures reported from this Sub-District have varied from 15,000 to 25,000 pcs. of salmon. This amount does not exceed the domestic requirements of 100-125 permit holders.

However, it is my opinion, the number of salmon actually taken from the Non-Tidal portion of the Skeena River during 1969, legally and illegally, was well in excess of 100,000 pieces. An estimated 75,000 salmon were taken legally by Indian Permit holders during the open period/6:00 P.M. Sunday till 6:00 P.M. Thursday of each week/. At least 50,000 were taken illegally by Indians during the close period for the food fishery, and by White poachers.

The estimate of fish taken legally by permit holders was arrived at by the sampling method, /observations of the number of fish actually taken from a net in one lift at various locations throughout the season, and the average Meters employed in the fishery. The figure 75,000 is the product of the catch per unit of effort (25 pcs) times the number of units of effort (3,000).

The meters used to arrive at this estimate are conservative. During the peak of the sockeye run up the Skeena River in July and August it is not uncommon to take up to 100 salmon in a net in one day at some of the better fishing spots.

At least 90% of the catch was sockeye, the other 10% were springs, coho, pinks, chums and steelhead.

This estimate does not include thousands of pink salmon that are taken during July and August while fishing for other species, killed by rough handling, and wantonly abandoned. Fortunately the survival rate for netted pinks is high even after rough handling, or the destruction of this species would be much greater. The pinks are caught incidentally while fish for other species.

Due to the light run, the catch of coho per unit of effort was small. On years when heavy runs occur many thousands of this species are taken during September and October.

A large per-centage of the salmon taken legally in the Indian Food Fishery, and most of the fish taken illegally are taken for sale. While some fish is sold locally, most of it is disposed of either directly, or indirectly through commercial fishermen, to the canneries at Prince Rupert and Port Edward.

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A logical question at this point is, why were violations of this magnitude allowed to take place? The answer is, the personnel and equipment available in this Sub-District to enforce regulations are completely inadequate.

While it is obvious the Indian Food Fishery is the focal point, this problem is of broader scope. To a large degree this problem can be attributed to abuse of food fishing privileges by Indians, but other ethnic groups are either directly or indirectly involved in all aspects, catching, transporting, buying and selling.

It might appear that further restrictions on the Indian Food Fishery is the complete answer. However, it has proved impossible to effectively enforce a three day closure. Further restrictions would not be effect unless the means to enforce them were available. Trafficing in salmon is a lucrative business, and well worth taking high risks.

Following are my recommendations for exercising more effective control over the Indian Food Fishery, combatting illegal fishing, and thereby reducing the number of salmon taken from the non-tidal portion of the Skeena River to an acceptable level.

(1) A boat patrol on the Skeena River from May till October 31st. ✓

At the present time we have an 18 Ft. Smokercraft with a 65 H.P. outboard motor at Terrace. It arrived late in the season to be used during the sockeye run. It was used extensively during September and October, and proved to be very effective.

However, the length of river to be patrolled /160 miles from Kwinitza Creek to Kispiox/ is to great to be effectively covered by one boat.

For effective coverage a second patrol boat, operated from Hazelton is required. ✓

(2) During the sockeye run up the Skeena a patrol should be maintained on Highway #16 to check for vehicles transporting illegal salmon. This work should be co-ordinated with, and whenever possible carried out with assistance from the R.C.M.P. Road Patrol Division.

(3) Patrol boats and vehicles should be equipped with radios connected to the B.C. Telephone System. To be used to co-ordinate patrols.

*Patrol
Terrace
Hazelton
and other points*

(4) At least one more Fishery Officer would be required to put an effective river and highway patrol into operation.

The value of Fishery Guardians operating alone is doubtful. Fisheries personnel engaged in this type of work are subject to constant attempts at intimidation. The Guardian employed at Terrace this past summer, and his family were subjected to constant abuse and threats by fish poachers.

While Career Fishery Officer should not be, and usually are not affected by attempts to intimidate, it is unrealistic to expect seasonal employees to display the same degree of fortitude, particularly when required to carry out patrols alone. ✓

(5) A large per-centage of the population of the Skeena Valley/ particularly the Terrace Area/ are recent arrivals, and are unaware that it is illegal to buy fish taken locally.

The fact that it is illegal to buy fish taken locally should be publized via television and newspapers. ✓

OK

If the Department feels that the number of salmon taken each year from the Skeena River is unacceptable they will have to accept the fact that more personnel and equipment are pre-requisite to more effective control.

My experience during the past summer indicates that the personnel and equipment presently available is completely inadequate to check, or even seriously affect, illegal fishing in this Sub-District.

I realize that equipment and personnel are not easy to obtain, and even if the Department accepts my recommendations, it would be some time before they could be put into effect.

In the meantime there are changes that can be carried out on the local level that would facilitate control of the Indian Food Fishery.

(1) In the past it has been policy in this Sub-District to issue Indian Permits that authorize the holder to fish anywhere in the Skeena River.

Food fishing should be restricted to the reservation where the holder is registered. If an individual's food fishing privileges were restricted by permit to the reservation where he was registered, this would in effect limit the possession of salmon/other than salmon taken by angling/ to an Indian reservation.

Any person found with sockeye, pink or chum salmon in his possession off an Indian reservation could be charged under Section 18 of the Fisheries Act. This restriction would facilitate more control over Indians transporting salmon.

(2) Fishing by Indian Permit holders should be restricted to set nets. The use of drift nets is very difficult to control.

(3) Consideration should be given to a reduction of the time when food fishing is permitted. Fishing should not be permitted during the peak of the pink run in August. A prohibition on fishing at this time would save thousands of pink salmon from wanton destruction.

(4) Some aspects of this problem/illegal sale of fish, and sale of illegal fish/extends into adjacent Sub-Districts. The success of any effort to curtail these activities would be contingent on good co-ordination with, and co-operation from the personnel in these Sub-Districts.

Prior to the 1970 fishing season a meeting should be held at District Headquarters to discuss this matter.

Morris E. Bogart
Morris E. Bogart
Fishery Officer

Annual Report 1970
Terrace-Lakelse, Sub-District, Terrace B.C.

Description of Terrace-Lakelse, Sub-District

The Terrace-Lakelse, Sub-District, an area of approximately 5,000 square miles, comprises the Skeena River Watershed from Kwinitca Creek upstream to the confluence of the Skeena and Kispiox River.

The major tributaries of this section of the Main Stem Skeena are the Gitnadoix, Kasiks, Exchamsiks, Dratew, Lakelse, Kalum, Zayoetz, Kitwanga and Kispiox River. In addition to these nine major tributaries there are 60 secondary streams suitable for salmon propagation.

The 69 streams in this Sub-District contains approximately 600 miles of spawning grounds that are utilized by one or more species of salmon.

The total population of this Sub-District is approximately 21,500, roughly triple the 1960 population. The two main centres of population are the Greater Terrace Area /17,500/, and Hazelton /4,000/. These figures include adjacent Indian Reservations. The greatest increase has taken place in the Terrace Area. The population of this community and the surrounding area has expanded from 5,940 in 1960 to 17,500 in 1970. The population of the Hazelton Area has remained static during this period. In addition to the two heterogeneous centres of population listed above there are seven Indian Reservations.

Fisheries

Commercial Fisheries

No commercial fisheries in this Sub-District

Indian Food Fishery

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

In 1970, 165 Indian Permits were issued for domestic fishing, an increase of 40 over the 125 issued in 1969. This increase was due to the high rate of unemployment in this area during the summer months.

With the exception of a small fishery carried on by the Kitwancool Indians on the Kitwanga and Kitwancool River, Indian Permit fishing is restricted by permit to the Main Stem Skeena. A Main Stem fishery distributes exploitation, and tends to minimize over fishing of any particular stock.

This fishery is exclusively a gill net operation, and wherever practical it is restricted to the use of set nets. A few Permits authorizing the use of drift nets were issued for the Kitwanga Area. This was necessary as there are not sufficient locations suitable for set nets to accommodate the permit holders on this reservation.

Wherever possible fishing was restricted to areas immediately adjacent to reservations. A few departures from this policy were necessary to accommodate Indians living off reservation.

This fishery was conducted principally on Babine sockeye. The take of other species is much smaller, and in the case of some species such as pinks and chums incidental.

The following is a resume of the catch figures for the Terrace-Lakelse, Sub-District for the five year period 1966 to 1970.

<u>Year</u>	<u>Sockeye</u>	<u>Cohoe</u>	<u>Pinks</u>	<u>Chums</u>	<u>Springs</u>	<u>Steelhead</u>
1966	11,249	2,450	1,901	436	895	1,188
1967	17,049	1,709	2,407	66	1,158	681
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

The following is a resume of the salmon and steelhead catch at the various fishing sites on the Skeena River, by species.

<u>Location</u>	<u>Number of Licences</u>	<u>Sockeye</u>	<u>Cohoe</u>	<u>Pinks</u>	<u>Springs</u>	<u>Steelhead</u>
Terrace	47	5,000	400	1,000	500	100
Nazelton	29	5,000	300	4,000	400	150
Glen Vowel	10	2,000	100	2,000	200	100
Kispiox	22	4,500	300	4,000	300	100
Mitwanga	18	3,000	300	4,000	300	125
Mitseguecla	21	4,000	200	5,000	400	100
Mitwancool	13	600	-	-	125	-
Cedarvale	5	1,000	100	1,000	200	25

Sport Fishery

During the summer of 1970 a Sport Fishing Officer /Norman Leamen/ who operates from District Headquarters at Prince Rupert covered the sport fishery on the Skeena River Watershed.

Due to the pressure of other work neither the Patrolmen in this Sub-District, or myself were able to devote much time to covering this activity. However, whenever possible the personnel in this Sub-District rendered all possible assistance. Consequently I will confine my observations on this subject to a few general remarks.

Due to the cool weather that prevailed during the spring and early summer months, and the below normal snowfall during the preceding winter, the annual summer rise on the Skeena River which usually occurs in May or Early June, did not take place until July. At the peak of the spring run the Main Stem Skeena was high and turbid. Consequently the catch of this species per unit of effort was down from 1969.

Good catches of coho were taken by anglers on the Lower Skeena /Cedarvale to the Kasiks River/. The catch per unit of effort on the Upper Skeena /Cedarvale to Kispiox/ was well below normal.

This decrease in the production of forest products can be attributed to a depressed market, and shut downs due to strikes during the summer months.

Enforcement

During 1970 a total of 21 prosecutions were carried out for violations of the Fisheries Act and the British Columbia Fishery Regulations. Charges against two persons were with-
drawn. One charge was dismissed by the Court. One case has not been disposed of by the Court at this time.

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

- 3----- Port fishing
- II----- Violations of Section 32 of the F.O. Regs
- 5----- Illegal possession and illegal fishing by non-Indians
- 2----- Violations of Section 33 of the Fisheries Act

Total 21

In addition 7 gill nets that were being used illegally were seized from a person or persons unknown.

In 1970 a number of new restrictions were incorporated into the Indian permits issued in this sub-district, for the purpose of more effectively controlling persons who were illegally appearing their fishing privileges.

(1) However practical fishing was restricted to the use of gill nets. The one exception, a few permits authorizing the use of drift nets were issued at Kitwanga. This departure was necessary as there are not enough locations suitable for net sites to accommodate the permit holders at this reservation.

There were no objections to this restriction.

(2) Fishing gear was limited to one set net, not to exceed 10 fathoms in length, for each permit holder. This restriction was aimed at a small minority who have been in the practice of using more gear than is normally required to provide fish for their own use, and have a history of illegal trading in salmon.

There were a few objections to this restriction. However, it can be pointed out that all objections came from persons who have in the past, and are still attempting to take quantities of salmon far in excess of their domestic requirements.

Five Indians were prosecuted for violating this regulation.

In one case a violator who was fishing a 22 fathom net was sent under surveillance for 20 hours. He was observed taking 4 1/2 sockeye during this period.

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Another violator/A person with one dependent/ was using two nets totalling 35 fathoms in length when he was apprehended.

There were no complaints concerning this regulation from permit holders using gear 10 fathoms or less in length. The average length of set gear in use on the Skeena River is six to seven fathoms.

(3) Permits were issued for specific locations, and wherever possible, fishing was restricted to the portion of the Skeena River adjoining the Reservation where the permittee was registered. A few permits/mainly in the Terrace Area/ were issued for other locations.

The purpose of this restriction was twofold; first it facilitated control of persons who previously fished a number of nets at widely dispersed locations. Secondly it facilitated control over fish being transported by Permit Holders for illegal purposes.

There were no complaints concerning this regulation.

During the sockeye run, June till late August, fishing was permitted for 4 days each week /6:00 Sunday till 6:00 P.M. Thursday/.

At the peak of the pink run up the Skeena /August 23rd till Sept. 13th/fishing was restricted to 1 day per week. The purpose of this restriction was the preservation of pink salmon.

In the past large numbers of pink salmon have been taken incidentally while fishing for other species, and abandoned.

There were no complaints concerning this restriction.

During the summer, June till September, all available personnel in this Sub-District were fully engaged attempting to control the Indian Food Fishery, illegal fishing and trafficking in fish by both Indians and Non Indians.

During this period patrols were carried out by river boat on the Skeena at regular intervals. All the nets that were seized from Persons Unknown, and most of the violators that were prosecuted were detected by the river patrol.

However, it should be pointed out that one river boat cannot provide adequate coverage on the 180 mile section of the Skeena River that lies within the boundaries of this Sub-District. Another boat patrol based at Hazelton is necessary if the Skeena is to be given adequate coverage.

During the past summer the river patrol was seriously disrupted by outboard motor failure. A spare motor is imperative for an effective operation of this type.

During the peak of the sockeye run/July, Early August/ a checking station was operated at regular intervals on Highway #16 west of Terrace. A large number of vehicles were checked for illegal fish, and fish being transported for illegal purposes.

These road blocks were successful in so far as they prevented commercial fishermen and cannery workers who were returning to the Coast from upcountry, just prior to the weekly opening of the commercial fishery, from transporting salmon.

Outboard Motors.

There are 5 outboard motors on charge to this Sub-District I-5.5 H.P. Evinrude, I-3 H.P. Johnson, I-9.8 H.P. Mercury, I-9.6 H.P. Johnson, I-65 H.P. Mercury. At the present time all are in satisfactory operating condition.

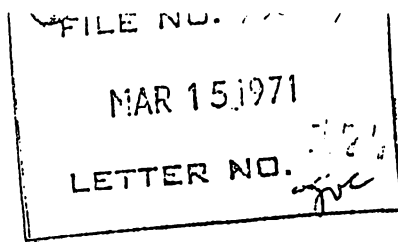
Information, Educational, and Other Programs

During the past year Department of Fisheries films were shown at various schools in the Area.

A close liaison has been established and maintained the Municipality, the various branches of the Provincial Government in this Area and the R.C.M.P.

Morris E. Bogart

Morris E. Bogart
Fishery Officer



Smithers, B.C.,
March 4th, 1971.

J.W.Connor,
District Conservation Officer,
Prince Rupert, B.C.

ANNUAL NARRATIVE, BABINE-MORICE SUB-DISTRICT
1970

1. GENERAL DESCRIPTION OF SUB-DISTRICT.

The Babine-Morice is a large sub-district situated in the interior of District #8, B.C., to the North and East approximately two hundred miles inland from the coast of British Columbia. Situated approximately just above the fifty seventh degree North Latitude and just above the fifty four degree North Latitude, and between one hundred twenty six degrees and one hundred twenty eight degrees West Longitude. The sub-district comprises approximately twenty five thousand square miles. The Township of Smithers lies centrally in the sub-district, a small remote village of approximately thirty nine hundred people. The main industry being logging and lumbering, mining, and tourism during the summer months.

Babine Lake situated in the Eastern portion of the sub-district is the largest fresh water lake in the Province of British Columbia, approximately one hundred miles in length with an average width of approximately two miles, the lake lies in south-east north-west direction. The Morice Lake lying to the south and west is the second largest in the sub-district, with Nanika and Kidprice to the south of the Morice Lake making up the watershed.

Other populated improved towns; Houston, situated forty four miles South of Smithers is a fast growing and prosperous community with the completion of the Bulkley Valley Forest Industries sawmill complex and shopping centre, is now the second largest community of approximately one thousand people. Other villages and towns namely Topley, Granisle, Telkwa, and smaller places such as Forestdale, Topley Landing, Pendleton Bay, Quick, and outlying farmers making up a white population of approximately twelve thousand for the sub-district. Indian population bands at Moricetown, Fort Babine, Topley Landing is given at one thousand four hundred people.

The Canadian National Railway serves the sub-district with the main line through to Prince Rupert, the Coachways bus service, and an Airport, and a Okanagan Helicopter service. The airport passenger service is supplied by Pacific Western Airlines with Trans-Provincial Airline service supplying charter flights at the airport and McLure Lake. The Coachways bus service and the Airport are other means of transporting people other than the railway.

The sub-district has some twenty eight hundred miles of rivers and streams, which consists of the Skeena River drainage above the Kispiox River and the Bulkley River commencing at the Suskwa River, and includes the upper portion of the Copper River.

Within the sub-district there are sixty six spawning areas, the major areas being the Babine River, upper Skeena and the Morice Rivers. The Babine River, Babine Lake and tributaries provide ninety percent of the sockeye spawning ground of the Skeena River system.

2. FISHERIES

1. Commercial Fisheries. - Nil.
2. Sport Fishery (Tidal Water) - Nil.

Sport Fishery (Non Tidal).

- a. Provincial Angling Licences sold in sub-district;

Canadian	Non-Canadian(Minor)	Non-Canadian	Short Term	Total.
1970-2397	141	553	338	3429
1969-2201	130	509	407	3347
1968-1946	253	408	236	2843

- b.
- Estimated Catch Sport Fishermen;

	Coho	Springs	Jack Springs	Steelhead
Moricetown	255	382	459	103
Bulkley River to Smithers	100	80	120	150
Smithers to Morice River	300	50	100	200
Upper Bulkley	50	25	25	10
Morice River	100	150	50	175
Babine River	150	20	50	200
Upper Skeena	75	75	50	200
1970	1,030	782	854	1,038
1969	350	1,000(Spr & Jks)		300
1968	1,597	2,107	"	1,457

The non-tidal sport fishery for the sub-district was better for 1970 than 1969 but was lower than 1968. Dry year for 1969 and low spawning runs was recorded.

- c.
- Closures.

Morice River- Lamprey Creek to Morice Lake- By Regulations.
 Fort Babine to Nilkitkwa River - By Regulations.
 Babine River- By Regulations.
 Morice River- By Regulations.
 Fulton Spawning Channel- Closed Aug.17th to October 31st. 1970
 Pinkut Spawning Channel- Closed Aug.17th to October 31st. 1970

- d.
- Gear Restrictions.

Morice River, Babine River and tributaries have a gear restriction on the use of roe. Babine River effective February 28th 1970 new regulations in effect; Dec. 1st to April 30th of each year closed for all fishing downstream from the lower end of Nilkitkwa Lake, no angling from boats in the river, and no uses of roe or compound of fish roe and oil at anytime.

- e.
- Indian Food Fishery.

Catch in pieces;

	Place	Sockeye	Coho	Pink	Chum	Chinook	Sthd.	Char	Total
1970	Babine	20,048	140	400	0	125	200	451	21,364
	Moricetn	844	648	329	0	728	211	0	2,760
1969	Babine	17,293	130	20	0	65	30	0	17,508
	Moricetn	516	755	481	0	485	75	0	2,312
1968	Babine	19,146	0	0	0	47	0	0	19,204
	Moricetn	840	2046	227	0	1017	160	0	4,790
1967	Babine	18,992	29	18	0	72	1	0	19,112
	Moricetn	598	1216	180	0	1608	111	0	3,715
1966	Babine	18,652	137	8	0	149	6	0	18,952
	Moricetn	2,442	2571	465	0	1233	418	0	7,129

The Skeena River above the Kispiox to Kisgegas permits usually issued by the Guardian for the Terrace office, and permits are accounted for by the Terrace Officer. Our understanding this year that no permits were issued but, the Guardian estimates two families fished at Kisgegas took 700 sockeye, 200 coho & 100 pinks for food fish.

f. Indian Permits.

Fort Babine -	25
Topley Ldg. -	9
Pendelton Bay -	18
Sutherland R. -	3
Moricetown -	54
Owen Lake -	1
Total	<u>110</u>

Fort Babine Indian Band list indicates a population of 859 people. This covers the whole Babine Lake area and not the actual people at Fort Babine. There are approximately 30 families living in or around Fort Babine which live there year round. Fishing is done by means of gillnet on a four day week, 6 P.M. Sunday to 6 P.M. Thursday during runs of sockeye and usually ends with late coho & Lake Char fishing in the fall. However this year and I understand for years past, Fort Babine people have been taking spring salmon on the grounds above the Counting Wier with Gaff hooks without the sanction of a permit. Other places on the Lake uses nets for food fish.

Moricetown Indian Band list indicates 530 people living in and around the village. Fishing is done by gillnet anywhere from the Suskwa River to just below the estuary of Trout Creek, usually about 10 nets operate each year. The remainder is by dipnet or gaff operating in the Moricetown canyon at the falls area. Fishing is on a split week operation from 6 P.M. Sunday to 6 P.M. Tuesday, and 6 P.M. Wednesday to 6 P.M. Friday.

3. SPAWNING SUMMARY.

(a) Salmon

(i) 1. The Babine River and tributary streams in Babine Lake are the main sockeye spawning areas for the Skeena River water shed. 95% of the Skeena sockeye spawn in this area. The Upper Skeena and sockeye destined for the Nanika River are minor stocks. The Upper Copper has minor stocks. All streams had lower water levels than 1969 which was recorded as very low records, Maxan Creek dried early with no escapement was recorded, several creeks in Babine Lake dried with no escapements, Upper Skeena and Nanika River, the Upper Copper had adequate water levels for spawning. There was no fall rains this year to offset the dry summer and give relief to the situation. Frost was prevalent in September with first snowfall for the year, temperatures continued to drop below zero in November with more than a foot of snow on the ground. Smaller streams which were lower than normal were iced over early in November.

2. Sockeye

Salmon migrations counted through the wier on Babine River by Research personnel totaled 662,000 large and 166,000 jacks, by September 18, 1970. By this date Research personnel finished counting salmon and the gates were opened, small numbers of late sockeye continued to move onto the spawning grounds.

1970 returns were slightly over 1965 brood year escapements of 644,000 large sockeye.

Fulton Spawning Channel had 241,000 mixed sockeye,

Babine River approximately 318,000 mixed sockeye on the grounds. The remainder adults and jacks, approximately 217,000 spawned in other tributaries on the Babine Lake including lake spawners, with Pierre creek, Twain, Morrison, Grizzly being the major producers and 20,000 sockeye to the Indian Food Fishery accounting for the total.

3. Cohoe

An estimated 15,200 coho spawned in the sub-district streams tallied on early run fish. Late run coho in November and December were still prevalent on some streams. Toboggan creek for example, coho were observed in open places in the ice on December 11, 1970.

1967 brood year estimates indicate a very good escapement with lots of space for more.

4. Pinks

An on year for pinks in the sub-district broke all records for the past 20 years. Highest escapement recorded in Babine River indicated 80,000 for highest escapement over 20 years. 1970 escapements for Babine River was 166,000 pinks counted through the wier with 10,000 below the wier for a total of 176,000. The Bulkley River spawning estimates accounted for 3,600 pinks on the grounds, scattered in side channels throughout Bulkley and Morice River areas. The Buck River had no pinks as was hoped for after stabilization of the creek, however spring salmon spawned on the created spawning channel for the 1st record of springs in this creek.

5. Chum

There were 15 chum salmon counted through the wier on Babine River. Chum invariably spawned with pinks on the Babine River. 1969 there were 9 chum counted through the wier, an 80% increase over 1969 escapements. 2 chum recorded in 1966 and 1967 for each year, 1970 shows a 450% increase over brood year.

6. Chinook

A total of 9,150 spring were recorded for the sub-district for 1970. Babine system - 1650, Upper Skeena 2,600 and the Bulkley Morice system 4,900 spring. 1965 records indicate 13,000 spring for the sub-district and 1966 records indicate 11,100 springs for the area. A definite decline from brood year escapements. As afore-mentioned Buck creek situated at Houston had some 34 large springs spawned on the improved grounds up to the canyon for 1st record of springs in this creek.

(ii) Weather Conditions And Water Levels

The snow fall for 1970, recorded March 1970 - February 28, 1971, water content was only .52 inches above the water content for 1969, same reporting dates. Was again recorded as a below normal year. Poor run off in early spring caused many instances of dried creeks throughout the sub-district. There was no fall rain to alleviate the situation. Babine Lake water levels continued to drop to lowest level recorded and remained the same until freeze-up.

Fall and winter of 1970 - 1971 was very cold with below freezing temperatures starting late September during night hours.

Summary of Temperatures and Percipitation

March 1st 1970 - February 28th 1971;

Month	Snowfall	- rainfall	- water content	Temperatures		
				High	Low	Average
March	5.5	0.25	0.77	51	5	34.5
April	2.1	0.16	0.34	62	21	39.4
May	Tr	1.43	1.43	65	27	46
June	-	.41	.41	80	33	55.8
July	-	3.07	3.07	80	32	54.8

August	-	.12	.12	62	34	50.1
Sept.	.10	1.92	1.93	68	24	48.1
Oct.	1.7	.76	.93	68	20	41.1
Nov.	12.8	.22	1.35	53	-16	22.3
Dec.	11.9	-	1.04	45	-27	11.1
Jan.	38.3	.98	4.08	44	-19	14.3
Feb.	7.3	.19	.81	45	-21	16

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(iii) Fry Salvage

Nil.

(b)(i) Herring

Nil.

4. Environment, Multiple Water Use.

(A) Pollution

The most significant pollution occurred in November, 1970, with the Canadian National Railway at mile 109.3 on the Bulkley River near Quick, B.C. Engineers from Prince George started a rucking of rock in the river to stabilize the river bank for the railway. Work was under way by Kach Contractors of Edmonton, Alta. Silting and pollution in waters frequented by fish was involved and work stopped until complied with under new section 33 of the Fisheries Act. Subsequently plans and agreements were put forward and work was allowed to continue upon certain conditions.

Pacific Inland Resources Ltd. (formally Northern Interior Forest Products Ltd.) were brought to task in April for pollution from sawdust on the Bulkley River. At that time it was Northern Interior Forest Products Ltd., went into receivership, and a new company was formed, namely Pacific Inland Resources Ltd. A great amount of work was done on the burner which cut down the heavy spread of sawdust, but did not stop fines. Continued pressure on the new company has promise of installing a new type of burner in the furnace called a Robert Morse - Rees burner control. The company will submit drawings and plans before installations.

The Bulkley Valley Forest Products Ltd. at Houston are moving with their operations so fast in the field; road building, bridges, landings on lakes, and general forestry, necessitates patrols, public relations and visits to management, and occasional threatening. One occurrence on the North Bulkley road near Lund creek, the company were stopped work. This involved a mud slide in the creek. Constant static from the public to do with their proposed Pulp Mill helps to keep pollution to a minimum.

Granisle Copper mill on McDonald Island completed a second settling pond for their wastes adjoining the old pond. Patrols via boat to the area was sufficient to indicate little or no pollution as far as tailings, chemical discharge might be a factor. A possible future pollution could be a 50 foot wall of tailings above the rock wall on the north side of the old pond. Recommendations to enclose the north bay at two entrances have been submitted to guard against the tailing pile collapsing and entering the lake.

Houston sewage disposal pond was operational in 1970 with little concern to the river to date. The Village of Smithers old sewage outlet was a pollution to the Bulkley river during low water. The village was ordered to cut a water channel through a large gravel bar for means of better dissolving of the effluent collecting in front of Mathlyn Lake creek. A pond similar to Houston is on schedule for 1971.

There are minor problems with Dept. of Highways, particularly the removal of old pilings at Smithers in the Bulkley supporting the old highway bridge. Mining explorations, land clearing operations and Forestry cutting permits all require constant attention.

(B) Industrial Development.

The development of Noranda mine on Newman Peninsula Babine Lake this year was the largest of any in the sub-district. Work commenced early on a 7 mile road from the village of Granisle to link with a ferry dock directly across from the mine site. On Newman Peninsula land was stripped for the mill and townsite area, overburden was cleared for their open pit mine, salvagable timber was stockpiled. A bubble line was installed to keep the lake open for the ferry, and work progressed throughout the season to the years end.

Nadina Mines continued exploration and clearing land for their new mill site.

The township of Houston completed a new shopping centre, continued progress on the Mt. View properties.

Bulkley Valley Forest Products opened their mill and commenced cutting lumber for export on a trial basis, many problems confronted the operation on such a complex type of mill. New bridges were completed at Morice river, Bulkley river and Fulton river under pass and bridge. The Bulkley Valley high road was completed to Babine Lake. Dock landings were started on both sides for their log barges; roads were pushed in on the east side of Babine Lake to their logging areas.

Pacific Great Eastern Railway have reached Azuklotz lake with their rail survey line. An excess road from Fort St. James to the lake is now available.

Several mines in the area; Climax Molybdenum completed explorations on Hudson Bay Mountain, Cronin-Babine active, Silver Standard active, Granisle Copper and Forestburg Collieries active. There was explorations by other mining interests in several places in the sub-district with the ground Hog coal explorations in the Upper Skeena area being the most important.

(c) Obstructions and River Diversions

Stream clearance work was somewhat hampered this year by the resignation of a Guardian holding a blasters certificate.

Beaver dams continue numerous throughout the sub-district, the Owen creek area is considered the worst for beaver activity, Bulkley River above Houston to Maxan lake numerous, Tahlo creek very bad, Gosnell numerous in higher areas. Other streams continue bigger problems each year.

Stream clearance amounted to what little could be done by hand by guardians and fishery personnel, beaver dams and log jams were removed when time allowed earlier in the season. Records indicated on attached list account for efforts by fishery personnel:

4. (c) Obstructions and River Diversions
Babine Morice sub-district, 1970.

<u>Date</u>	<u>Place</u>	<u>Obstruction</u>	<u>Equipment</u>	<u>Personnel</u>	<u>Costs</u>	<u>Days</u>	<u>Remarks</u>
June 18	Collins Lake	culvert blocked	Hand	J. Roys	25.00	1	Blocked with debris
July 13	Bulkley R.	1 log Jam	Hand & powder	F. Wall	25.00	1	
July 14	Bulkley R.	3 log jams	" "	F. Wall	45.00	1	
July 15	Pierre Cr.	3 " "	Powder	F. Wall	45.00	1	
July 16	Twain Cr.	3 " "	Powder	F. Wall	45.00	1	
Aug. 12	Sutherland R.	2 " "	Hand	F. Wall	25.00	1	
Aug. 13	"	1 " "	Hand	F. Wall	25.00	1	
Aug. 22	"	1 " "	Hand	F. Wall	25.00	1	
Sept. 20	Buck R.	2 " "	Hand	J. Roys	35.00	1	
Oct. 13	Sutherland R.	2 Beaver dams	hand	J. Wall	25.00	1	
Nov. 11	Kathlyn Cr.	1 " "	Hand	A. Groat			
				D. Meyers	30.00	1	
Nov. 12	" "	1 " "	Hand	D. Meyers	10.00	1	
Nov. 13	" "	1 " "	Hand	D. Meyers	10.00	1	

(c) (1) Late in the season the resource Development came up with a stream clearance program, which was valuable to getting at major jams and beaver problems was too late. The program was instituted mid October, after the fish spawned in the streams. Care then had to be exercised to keep from injuring spawning areas while removing log jams and beaver dams. Any program of this nature occurring for 1971 should start 1st of June after fry emersion and end by end of September, and any work there-after on beaver dams be keep to minimum explosives and hand work to get the fish through.

The following is work accomplished by 1 crew of 2 men on Babine Lake, 1 crew of 2 men on Bulkley River upstream from Houston, including the services of 1 blaster. Work commenced October 14th, 1970 to November 19th, 1970, work was stopped due to freeze up. A total of \$6,000.00 was allotted for the sub-area:

Food	Vehicles	Saws	Wages	Misc.(dynamite, etc.)	Total
194.18	286.00	559.00	2,764.52	1,153.80	4,957.50

(d) Gravel Removal

There were no serious problems occurred which had a detrimental effect on fisheries. However this problem is foreseeable in the future with the growth of industry and roads in the sub-district. During 1970 the major effort was on the lower Buck creek at Houston. Rucking was completed and gravel was removed for approximately one mile above the highway bridge on both sides of creek to stabilize the banks. The C.N.R. removed gravel from their bridge crossing Buck creek below highway bridge. Gravel was removed at mouth of Buck creek to allow a better flow.

Recommendations that gravel removal orders be applied to the whole Bulkley River system and tributaries. Babine Lake, river and tributaries. The Upper Skeena River and all tributaries and lakes flowing into the Skeena system.

(e) Logging Operations

The Bulkley Valley Forest Products Ltd. is the number 1 operation in the sub-district, have practically control of the whole Bulkley Valley areas including Upper Copper - Morice Lake, Babine Lake areas.

Pacific Inland Resources Ltd. at Telkwa operate in the Telkwa valley area is second for the sub-district in production.

The Dielman Planer Co. Ltd., has a small holding situated on the north side of Telkwa river.

Small mills are being cut out except 1 small mill on Snake road and along highway 16 between Smithers and Moricetown.

1970 Bulkley Valley spent most of the summer cleaning Babine Lake of salvageable timber on the beaches. It is understood there would be no further towing of logs in the lake to Pendleton Bay as the mill was being phased out as soon as the mill at Houston commenced operations.

Area Forestry Cut for 1970 (Forestry figures)

Hazelton	2827 acres cut	8589 MCF,	39115 LF
Smithers	4800 " "	43,453 MCF	
	Value of Smithers cut: \$4,900,000.00		
Houston	2300 acres cut	13,900 MCF	
Pendleton Bay	Figures not seperable from Burns lake cut. (Burns Lake cut 1218 acres 2600 MCF.)		

(f) Water Licence Application.

1970 - 21 water licences were appropriated. There were several struck off the book as not in use or people had moved. A water diversion on Toboggan creek was again this year ordered closed or prosecution would be instituted. Investigations of the Smithers town water intake showed they were taking twice as much water as applied for, and no screens to stop fry or aquatic life from entering the well have been installed. Once fry pass the injection point where chlorination and fluoridation is injected in the water and passes into the well the fry are trapped and invariably die from the chemicals. Further monitoring is being done to firmly establish this point. There are instances to do with the Fulton spawning channel and Pinkut creek where screening have been found to not exist or they are negligent in providing screens.

(g) Placer Mining.

Nil operation in sub-district, however there was placer mine licences secured for one area approximately 40 miles from Skeena river up Babine River.

5. Trends in Fishing Industry.

Nil.

6. Enforcement.

(A) Commercial - nil

Sport - nil

Indian Fishery - nil

Other One prosecution for pollution of Bulkley River by sawdust, two illegal possession of fish were tried and convicted.

There were several warnings to sport fishermen in regards to possession limits and species of fish retained, particular American transients. There was warnings again involving U.S. citizens for buying fish from Indians. These instances will not apply next year as far as warnings.

7. Predators.

(a) Sea Lions - nil.

(b) Hair Seals - nil.

(c) Bear - Grizzly and Black.

Area is abundant with both Grizzly and Black bear. Only one black bear recorded destroyed for attacking, by Fishery Officers for the area.

Sportsmen took 10 Grizzly and 21 Black bear for 1970.

There were 1 grizzly and 8 black bear killed for protection by Game Branch and others.

(d) Grayfish - nil.

(e) Killer whales - nil.

(f) Other - Eagles numerous, particularly on Babine Lake, seagulls light, Mergansers Medium to heavy throughout area.

(A) Staff

- (i) Fisheries Officer A.M. Groat GT 111
- " " D.N. Meyers GT 11

(ii) F.P.L. Babine River

(iii) Three Guardians were signed on for the season, Moricetown, Fort Babine and Donalds Landing. The Donalds Landing guardian resigned for personal reasons half way through the season. Adjustments were made with the Fort Babine guardian to obtain the best results under the circumstances.

(iv) Comments and recommendations.

There is a difference between a stationary guardian on the coast and an inland guardian. The inland guardian is mobile and does many jobs. Because of a cutback in time for services for 1970, much of the preliminary work which must be done before fish arrive on the spawning grounds was minimized due to short period of employment. Fortunately there was some work accomplished on streams by the winter-works program, but this was too late in the season to assist salmon onto the grounds.

Recommendations for 1971:

- Moricetown - five months, commencing June 1, to October 31.
- Fort Babine - five months " " " "
- Donalds Landing - Seven months commencing May 1, 1971 to November 30. 1971.

Guardians are utilized pre season to access and clear streams, building and repairing cabins, clearing notable obstructions, painting cabins and F.P.L. Babine River, preparing Donalds Landing station for season; replacing floats, bouys, general cleaning and maintenance of outboard engines and boats to prepare for the season. This work is necessary for good management and utilization of money before the fish arrive.

A guardian for the Upper Bulkley and morice rivers should be made a permanent position, however we have been able to shift around pre-season before guardians take up their regular positions while the fish are running.

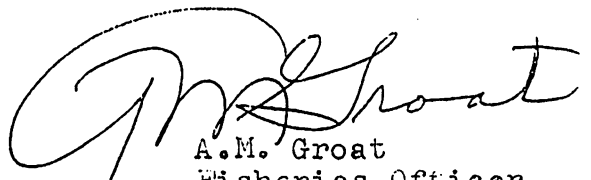
The need of an all terrain vehicle to accend streams to remove obstacles, to carry needed equipment and trail cutting. The uses of such a machine are almost undescrivable to save time and lengthen surveys on streams.

9. Information and Education.

(a) Continued public relations are maintained particulary in regard to pollutions. Information to students on Fisheries and pollution, the spawning channels, and acts and regulations governing fisheries.

(b) Works closely with resource and research personnel during the season.

(c) Contacts with Indian agencies, Fish and Game Branch, Department Of Highways, Forestry Branch, Railway personnel and the Forest Industry.


 A.M. Groat
 Fisheries Officer.

ANNUAL NARRATIVE REPORTCONSERVATION DISTRICT # 8, B.C.

- 1970 -

1. GENERAL DESCRIPTION OF DISTRICT

District No. 8 is the most northerly coastal Conservation District in British Columbia, and embraces the coastal area from Ulric Point on Aristazabel Island to the Alaska - Canada boundary, but not including the waters of Douglas Channel. Included in the District are the watersheds of the Skeena River, the Nass River, and the Stikine River. Larger and more westerly islands in the District include the Estevan Group, Pitt Island, Banks Island, Porcher, Stevens, Dundas and Zayas Islands. The western boundaries of the District bisect Hecate Straits. Total area is approximately 35 thousand square miles.

The District is divided into five sub-districts, including three coastal and two inland. There are further sub-divisions within the coastal areas for purposes of salmon management and statistics.

The District is generally very rugged and mountainous, with extensive glacial regions throughout the coastal range, thus creating very turbid rivers and streams, with the resultant difficulty in assessing spawning stocks of salmon and other fish.

The Skeena River system is the largest and most important salmon producing river in the District, and second only to the Fraser River in British Columbia. The major sockeye producing area in the Skeena system is Babine River and Babine Lake and tributaries, providing spawning grounds for some 90% of all Skeena sockeye. The Lakelse River and the Kispiox River are the major pink salmon producing streams in the system. Spring and coho salmon are also produced in numbers, while chum runs are comparatively light.

The Nass River is the next most important producer, accommodating good runs of sockeye, springs, coho and pinks, and chums.

The City of Prince Rupert is the political and economic hub of the District; a city of some 18,000 people including the fishing community of Port Edward. Fishing and logging are the important industries of the District, while mining, though important, employs few people. By road, the District extends some 300 miles along Highway 16 towards Prince George, the first 200 miles following the Skeena River, a tourist attraction offering prime non-tidal sport fishing. Prince Rupert is the fish processing centre of the north coast, where a large salmon pack is produced, while salmon, halibut, and groundfish are frozen or otherwise processed. Large cold-storage facilities are located here, with the product distributed by ship, rail, or refrigerated truck. Prince Rupert is termed the "Halibut Capital of the World", (by the local Chamber of Commerce.)

The lumber industry in the District is very extensive, and increasing rapidly. The timber, mostly spruce and hemlock, is milled at Houston, Telkwa, Smithers, Pendleton Bay, Hazelton, Terrace and Prince Rupert. A pulp and paper mill producing 750 tons per day is situated on Watson Island near Prince Rupert, while another large lumber and pulp mill complex is presently being constructed at Houston. Logs are brought down the Skeena River in booms, while on the Nass River log-driving is used to deposit the wood in tidal water. Large quantities of logs are also brought from Terrace to Prince Rupert by rail.

The population of the District is about sixty thousand, including some six thousand Native Indians, resident both in the urban centres, and in several large reserves on or adjacent to the Nass and Skeena systems. These latter people are employed largely in the fishing and logging industry, many of the women being employed in the fish processing plants.

ERC 416146, File 5871-BC-1-8, Vol. 11, 1976

3. INDIAN FOOD FISHERY - Statistics

Statistics by sub-district are shown below:

Nass Sub-district

Locality	Sockeye	Coho	Pinks	Chums	Chinooks	Steelhead
Port Simpson	1,599	462	3,647	557	4	14
Kincolith	2,473	120	179	271	69	21
Greenville	2,212	146	44	28	374	12
Canyon City	1,524	44	8	5	133	6
Aiyansh	1,423	74	0	5	96	7
Totals:	9,231	846	3,878	866	676	60

Skeena Sub-district

Skeena Estuary	2,600	65	200	50	60	30
Shawatlans Bay	30	-	-	-	-	-
Chatham Sound	1,500	5	200	5	-	-
Totals:	4,130	70	400	55	60	30

Grenville-Principe

West Coast Banks Is.	200	-	-	-	10	-
Kitkatla	-	-	100	-	150	-
Principe Channel	1,900	16	-	-	10	-
Ogden Channel	-	-	-	-	70	-
Totals:	2,100	16	100	-	240	-

Terrace-Lakelse

Sub-district	25,100	1,700	21,000	300	2,425	700
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Babine-Morice
Sub-district

Babine River & Lake	20,048	140	400	-	125	200
Moricetown	844	648	329	-	728	211
Totals:	20,892	788	729	-	853	411

District 8 Food Fishery Totals

Year	Sockeye	Coho	Pink	Chum	Chinook	Steelhead	No. People	No. Permi
1970	61,453	3,420	26,107	1,221	4,254	1,201	6,223	420
1969	49,961	3,864	2,859	440	1,761	877	5,948	337
1968	52,300	13,253	6,832	1,234	3,436	1,147	4,335	377
1967	53,641	7,501	8,291	1,495	6,024	881	4,207	409

The fishing pattern was similar to the previous year. The Nass River Indians took their salmon by gillnet in the Nass River proper, by individual permit, on a three day week from 6 P.M. Wednesday to 6 P.M. Saturday, from June 3rd until August 8th, and from September 2nd until October 3rd. The Kincolith and Port Simpson Indians took their Sockeye by gillnet in the sea adjacent to their villages, with the Kincolith people fishing on a co-operative basis on June 18th and July 10th, while the Port Simpsoner's fished on only one day, July 10th. People of both these villages also fished for Coho and Chums during late September and early October, in Work Channel, Quinimass Bay, and the mouth of the Nass River.

District 8 Food Fishery (cont.)

In the Skeena Sub-district it has been the practice in recent years to allow a fishery in the Skeena estuary during the peak of the Sockeye run. Sometimes this has been permitted on two or more days, while in 1970 it was held to only one 6-hour day. Included in this fishery are Indians from throughout the District who are fishing out of Prince Rupert. The fish is smoked or canned. Also, the local resident Indians are given permits for individual days or short periods at other times, to obtain more sockeye or some chums and coho.

In the Grenville-Principe Area the fishery is centred around the Kitkatla Indians, who gillnet Sockeye from the early Principe Channel runs, and late runs of Chum and Coho.

The Terrace-Lakelse fishery is a gillnet or drift-net fishery in the Skeena River up to Kispiox Village, and it is in this fishery that most abuses of the Regulations occur. The fishery is four days a week from early June, normally, until the end of the runs, and extends from 6 P.M. Sunday to 6 P.M. Thursday. This year to help combat abuses, maximum length of gillnets was restricted to ten fathoms. While this maximum is greater than the length normally used by the majority, there were violations and persecutions, with the result that sympathy was fomented for the violators.

The Babine-Morice Area is, with the exception of Moricetown Falls, a gillnet fishery in the upper Skeena, the upper Babine River, and Babine Lake. Abuses are rare, due probably to the more advanced condition of the fish near the spawning grounds. At Moricetown the Indians continually attempt to sell their catch to the tourists. This year the Moricetown catch was 844 Sockeye, 648 Coho, 329 Pinks, 728 Chinooks, 211 Steelhead, which constitutes a very light catch. Fishing periods each week are from 6 P.M. Sunday until 6 P.M. Tuesday, and from 6 P.M. Wednesday to 6 P.M. Friday. An attempt was made to induce the Moricetown Indians to use dip-nets rather than gaff-hooks in their Moricetown Falls fishery. This was unsuccessful, as during a two-week period of the Pink migration a closure was applied to fishing by means of gaff-hooks, and although their permits allowed the use of dip-nets, this method was not used.

There were fifteen violations of the Indian Food Fishery Regulations, Section 32 of the B.C. Fishery Regulations, in the District.

Oulachons

This fishery, unique in the District, is another food source and provides the Indians with grease, some of which they barter with other Indians.

An estimated 250 tons were taken in the Nass River this year, between mid-March and the latter part of April. The Port Simpson Indians fish in the vicinity of Red Bluff, while the Nass Indians fish in the vicinity of Fishery Bay where the rendering stations are located.

3. SPAWNING SUMMARY

Sockeye

Nass Area 3

The return of Sockeye was slightly less than average, with an escapement of 124,500 spawners. This compares with the ten year average of 134,000, and the main contributing brood year escapement of 146,000 in 1965. Meziadin Lake system was fairly well seeded with 80,000, while Bowser, Damdochax and Quinigeese had a total of 39,000, with 5,500 to minor streams.

Skeena Area 4

An escapement of 8,500 spawners compares favourably with the 1966 brood escapement of 6,000. Johnston Lake received 5,000, while Diana - Prudhomme had 3,000 and Shawatlans 1,500.

Grenville-Principe Area 5

The escapement of Sockeye was 25,000, well below brood year numbers. Bonilla and Curtis Inlet escapements were good, while streams in lower Principe Channel received weak returns.

Terrace-Lakelse Sub-district

The escapement of between 16,000 and 17,000 was light, compared to the main brood year return of 45,000 to 50,000. All systems were well below average.

Babine-Morice Sub-district

Spawning returns to Babine Lake were slightly above the brood year 1965, with 662,000 large sockeye this year compared to 644,000 in 1965. Fulton Spawning Channel had 241,000, Pinkut Channel had 32,000, while upper and lower Babine River had 318,000.

Coho

Nass Area 3

Coho returns were good, with an escapement of 43,000 spawners compared with the brood year escapement of 40,700 and the ten-year average of 42,500. Major recipient streams were Quinimass - 10,000; Meziadin - 5,000; Bear River - 3,000; Ishkeenickh - 6,000; Cranberry River - 3,000.

Skeena Area 4

Coho escapements were comparable to the brood year, with 5,500 spawners this year and 5,000 in 1967.

Grenville-Principe Area 5

Coho escapements to Area 5 were the lowest on records, with 11,000 on the grounds compared with 27,650 in the brood year. Late runs were practically non-existent.

Terrace-Lakelse Area

Coho escapements were well in excess of the cycle year, when 60,000 escaped from a brood spawning of 45,000. Largest increases were noted in the lower tributaries of the Skeena, i.e. Gitndoix, Kasiks, Exchamsiks, Extew, Lakelse Rivers.

Babine-Morice Area

Coho returns to the area are estimated at 15,000.