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Department Of Fisheries And Forestry,
109-417 West Second Ave.,
Prince Rupert, B.C.

Annual Marrative, Babine-Morice Sub-District 1969.

L. General Description of Sub-District

The Babin-Morice is a large Sub-District laying in the interior of District #8, to the north and east approximately 200 miles inland from the coast. Laying approximately just above the 57 degree N latitude and just above the 54 degree N latitude, and between 126 degrees and 128 degrees W longitude. The sub-district comprises approximately 25,000 square miles. The township of Smithers lies centrially in the sub-district; a small remote village of approximately 3900 people. The main industry being logging and lumber, with tourism during the summer months.

Babine lake laying in the eastern portion of the subdistrict is the largest fresh water lake in the province of B.C., approximately 100 miles in length with an average width of approximately 2 miles. The lake lays in a SE/NW direction. The Morice lake laying to the south and west is the second largest in the sub-district, with Nanika & Kidprice to the south of Morice making up the watershed.

Other populated improved towns; Houston _ a growing community due to a start on a large sawmill complex is the second largest community laying 44 miles south of smithers, population approximately 600 rapidly increasing with a townsite being built for the Bulkley Valley Forest Industries and plans for a large shopping centre. Other villages and towns _ Topley _ Telkwa _ New Hazelton and Hazelton making up the remainder for a population of whites in the sub_district of approximately 9000 and an indian population of approximately 1389, taking in Topley Landing _ Fort Babine and Moricetown. The Hazelton bands are reported on Terrace sub_district.

The C.N.R. railway serves the sub_district with a main line to Prince Rupert. Highway 16 runs through the area; completed blacktop highway with a new bridge crossing the Bulkley completed in 1969 situated approximatley 1 mile upstream from the old bridge washed out in 1966 and temporally replaced with a bailey bridge.

The sub-district has some 2800 miles of rivers and streams, which consists of all the Skeena river drainage above Hazelton, with the exception of the Kispiox river, and includes the upper portion of the Copper river.

Within the sub-district there are 66 spawning areas, the major areas being the Babine river, upper Skeens and the Morice rivers. The Babine river, Babine lake and tributaries provide 90% of the sockeye spawning ground of the Skeena river system.

2. Fisheries.

(1) Commercial Fisheries.

Nil.

(2) Sport Fisheries (Tidal Waters)

Nil.
Sport Fisheries (Non-Tidal Waters)

(cont, 2,)

2. (2) Sport sheries (Non-Tidal Waters)

Provincial	angling licences sold	in Sub-Distri	ots	
Canadian	Non_Canadian(Minor)	Non-Canadian		Total
1969_ 2201	130	509	407	3347
1968_ 1946	253	408	236	2843

Estimated catch:

Cohoe	Chinook	Steelhead	Total
1969- 350	1000	300	1650
1968_ 1597	2107	1457	5161

The non-tidal sport Fishery catch in this area declined sharply, possibly partially due to the light spring run-off with a hot dry dry spell during the early part of summer, and partially due to smaller sums of salmon to the grounds.

Closures.

Morice river - Seasonal closures.

Between Lamprey creek and Morice lake, from March 1 st to

Between Lamprey creek and Morice lake, closure to angling for salmon, from August 15 to September 30 th.

Babine River Seasonal closure.

Between Fort Babine and the mouth of the Nilkitkwa river, cl closure to angling for salmon, from August 15 to September 20 th.

Gear restrictions

Morice river and tributaries have a gear restriction on the use of roe, or the possession of roe, or any compound of fish roe and oil while angling.

2. (3) Indian Food Fishery.

Indian Food Fish Catch (in pieces)

Place 1969. Babine Moricetown	Sockeye 17293 a 5 1 6	Cohoo 130 755	Pink 20 481	Chums 0 0	Chinook 65 485	8t 'hd 80 75	Total 17508 2312
1968. Babine Moricetown	19146 840	0 2046	0 227	0	47 1017	0	19204 4790
	18992	29	18	0	72	1	19112
Moricetown		1216	180	. 0	1608 149	111	3715 18952
1966. Babine Moricetown	18652 2442	137 2571	465	0	1233	418	7129
1965. Babine Moricetown	18540 1501	252 3173	33 423	0	172 1413	17 177	1901 4 6687

Skeens from Hazelton to Kispiox, permits issued and reported by guardian through Terrace office.

Skeena from Kispiox to Kisgegas, permits issued and reported by guardian through Terrace office. Verbal report from guardian that 3 families fished this area, 500 sockeys and 100 cohoe catch reported by one family.

The Indian Food Fishery in the Sub-district is a non-tidal Fishery. In the Babine area There is a band population of some 859 people. 43 food permits were issued for gillnets during the season. There does not seem to be any change in the trend or development of this Fishery.

2. (3) Indian cod Fishery (cont)

In the Moricetown area there is some 530 people on the Band list. 46 permits were issued; 35 for gaffing 6 for gillnet and 6 for gillnet and gaff. As the surrounding country developes, these trend is for more and more natives from this band to have steady jobs during the spawning run and do less fishing. The majority of fish were taken by about a dozen of the permit holders.

Total salmon Food Fishery catch for the season was 19820 pieces. The most of the Fort Babine catch was smoked and dried. The Moricetown catch was mostly eaten fresh or frozen in home freezers.

The Fort Babine Fishery was open on a four day per week basis, from 6 P.M. Sunday to 6 P.M. Thursday. The Moricetown Fishery was open on a four day per week split basis, from 6 P.M. Sunday to 6 P.M. Tuesday and from 6 P.M. Wednsday to 6 P.M. Friday.

Recommendations:

Moricetown Fishery to continue on a four day split week for dip net and gillnet gear only. In reference to ruling made by Judge N.R. Young _ Regina VS Allan Naziel, jigging and gaffing being one and the same thing _ no permits to be issued for gaffing,

Permits to be issued from Smithers office(on Mondays)only.

3. Spawning Summary

(a) Salmon

(1) The Babine river and rivers and streams flowing into Babine lake are the main spawning areas of the Skeena watershed. The season started with very low water levels, which seemed to delay the sockeye runs. Rains during August and September increased the levels in most streams giving salmon good passage.

Sockeye. During the spawning run 634,400 large sockeye were counted through the Babine counting fence. The counting fence is situated eight miles down stream from the outlet of Babine lake. This is a slight decrease from the brood year fence count of: 1964 - 650,000 and 1965 - 644,000. Approximately 287,000 of these sockeye spawning in the Babine river. The balance were distributed in the streams and rivers flowing into Babine lake. Fulton river and artificial channel spawned 149,000 and Pinkut river and channel 37,000. The Upper Skeena run of 7200 sockeye compared to 1964 - 7500 and 1965 - 2900 sockeye. The Bulkley-Morice run of 4000 is a decrease from 1964,5500 and 1965 - 10,500 sockeye.

Cohoe. There was an estimated 16,500 cohoe escapement during the 1969 spawning season. The 1966 brood year escapement was approximately 17,000. The main areas of spawning being the Bulkley. Morice and the Babine river.

Pinks. Babine fence count of 75,000 pink salmon shows an increase over the 1967 fence count of 43,500. There were a few pink salmon scattered throughout the streams flowing into Babine lake but the main spawning took place above the Babine fence up to Nilkitkwa lake. The Upper Skeens run of 200 remains the same but the Bulkley system increased slightly with 3500 pinks compared to 1150 in the brood year.

Chinook. Estimated total of 9800 is a decline over brood years 1964 _ 16,450 and 1965 _ 10,700. The main spawning streams are the Babine river, the Bear river and the Morice river.

Total Spawning count for the sub-district:

Sockeye = 645,600 Cohoe 16,500 Pink = 78,500 Chinook = 9,800

(11) Weather conditions and water levels.

The snow fall during the winter of 1968 - 69 was below normal.

Lake levels remained weal below normal throughout the season. Late summer rains increased most rivers and streams to slightly above normal.

The fall and winter of 1969_70 was very mild with very little snow fall, but by the middle of January there was adequate snow coverage on the streams.

Summary of temperatures and precipitation from March 1, 1969 to February 28, 1970, from the D.O.T. records at the Smithers Airports

	Snowfall	- rainfall	- Total	Water	content	- Temperatures
* -	4				. :	High-Low- Average
March -	6.7 ^H	•38 ⁿ	.83#			42.5-19.4- 50.9
April -	.2	1.24	1.26			50.3.31.5. 40.9
May		. 28	.28		-	63.3.37.7. 50.5
June		•92	.92			76.7.48.3. 62.5
July		•60	•60		3.1	69.1_46.1_ 57.6
August		2.63	2.63		į.	63.3.43.6. 53.5
September	•	3.25	3.25		•	58 _41.6_ 49.8
Ootober-	Trace	1.73	1.73		*:::	50.4.30.5. 40.5
November.	.7.4	1.07	2.34			42.5.32 - 37.3
December.	12.9	•04	1.05		•	32.3.22,2.27.3
January.	14.5	Trace	1.09		•	18.4.27.75 13.1
February.		Trace	5.39	1		38.7.21.7. 30.2
				,ı \		•
			16.37			
			10			

(111) Fry Salvage.

Nil.

(b) Herring.

N/A

4. Environment, Multiple water use.

(a) Pollution.

The community development and construction of the Bulkley Valley Forest Industries mill complex at Houston were of some concern at the beginning of the year. Constant patrols by Fisheries Officers and one patrolman, plus public relations visits with management, Engineers, work forman, equipment operators and Village officials, kept pollution violations down to two minor incidences. These incidences were luckily discovered almost immediately and cleaned up within the hour.

The Northern Interior Forest Products Co. Ltd. burner at Telkwa was giving problems at the beginning of the year, but under pressure the company repaired the burner and eliminated most of the problem. There are still complaints about the burner from Telkwa residents. This mill is supposed to be phased out sometime in 1970.

land clearing by individuals in the agriculture industry created a few problems, but these were cleaned up satisfactory.

There is considerable mining exploration in the area, which could be a cause of alarm in the future. To datethere are only three operating mines in the area; Granisle Copper Ltd., on Babine lake, New Cronin_Babine Mine Ltd., and Forestburg Colleries Ltd.

Granisle Copper Ltd., on McDonald Island in Babine lake, have their settling pond in a bay contained by two causeways between McDonald Island and Starrett Island. Solids are consined for sixty (cont.5)

ADDITIONAL TO ARRUAL RABRATIVE 1969 - Section 4. (c) Costructions a giver Diversions.

Lorrective figures harden house the bodice appearance 1969.

	Late	Place	Obstru	tions	kquip, used	Personnel	Losts	Days	Hemorks.
	July 31st		2 log	3 beaver	Fowder a hand	Leyers - Wall	50.00	1	
	Aug 1st	Upper Copper	·	L " L " 6 "	11	11	45.00	. 1	•
	Aug 9th		l log	[11	1-1.11	25.00	1	
	aug 16th	Tseax River		6 "	u	bell - Mont	150.00	2	Tseax Mass sub-dist.
	Aug 16th		l log	2 "	ħ	hall	20.00	1	Mages only
	Aug 23rd	oven faxiem		4 ."	#	wall .	75.00	4	ferow a suck river incl.
	hug 30th	bulkley Hiver	2 houses	8 "	n n	Groat Meyers	75.00	3	wall, Tobagen a buck rk.
	_	Owen Crk.	2 log 2 " l hus	2 "	n u	iall	25.00	1	iks ending.
	Sept 6th		2 " 1 hus	8 "	į.	" .oyers	50.00	li,	fukley falls obst.
	Sept 13th	Owen bukley		16 "	11	11	100.00	1	
•	Sept 27th	n n	l log	1 "	11	ţ1	30.00	2	6 mile hast Topley.
	Jot lith	ti ii		4 "	ŧŧ	11	50.00	2	l'erow
	oct 11th	Kispiox	į	9 "	п	Ceyers Parent	100.00	2	Well blasting
		Tobagan (1 "	19	Well Payers	25.00	1	Stop off from Rispiox.
	oct 15th	Upper Copper	l bouse	8 "	11 11	Beyers wall	50.00	1	
1	ct 16th		l hs l lo	19	1	**	100.00	2	
	uct 17	Canyon Crk	·	3 "	rt 	Wall	35.00	1	Upper
	oct 17	Fulkley Opper		13	11	**	50.00	1	
	ct 18th	Knockholt	l log	3 "	11		50.00	1	Bulkley River
	oct 19th	Upper Copper	2 hs 1 lg	17 "	1	eyers wall	125.00	2	Incl Silvern & Fillow
	oct 25th		2 log	11	n	Vall	25.00	1	
	ct 31st	Eulkley		1 "	.	49	25.00	1	
	I								-3
									4.8
•	Totals	17 log tome	- 7 beeve	houses -	117 beaver dur	8	\$1505.00	39	·
	100018	TI TOR Jurin	1 554 46.	1100403 -	TTI DOG VOT CAN		\$100.00	29	
		,							
	1						000		
							A.M.J.		
	1						Bell-Gron	t.	
	1						fishery		
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4. (a) Pollutan (cont.)

days retention in this pond. A second pond is to be constructed adjacent to the present pond.

Forestburg Collieries Ltd. on Goathorn creek have discontinued washing coal.

The New Cronie_Babine Mine Ltd., on Cronin Mountain above Chapman lake produces lead_zinc, copper and silver. It has produced about 200 tons of concentrates annually, from 700 tons of ore. This mine has been bought by Mr. Paul Kindrat, who formally operated it for the company, and intends to increase production. This is of some concern to Chapman lake and Fulton river as the settling pond is inadequate for increased production.

The sewage disposal at the Bulkley Valley Forest Industries Sawmill and lumber site at Houston was remedied by installation of underground disposal fields.

A new sewage disposal pond was completed adjacent to the Bulkley river by the Village of Houston, will be operative in 1970, the overflow to enter Bulkley river after treatment.

The town of Smithers plan to start construction of a new sewage disposal system and plant in 1970, on a 57 acre site one_half mile notth of Smithers. The outlet of the field will be into the Bulkley river.

Babine lake caused a problem at the Fulton river spawning channel by silting, however this was remedied by a ditch alongside the read approximately one half mile from the overpass at Fulton river.

Other minor problems requiring vigilance include the use of herbicides by the Department Of Highways and the Canadian National Railways, farmers land clearing and polluting waters with fallen trees and debris, road building across creeks, and sawdust burners and logging roads too near rivers and creeks. Some silting still occurs from gas pipeline crossings of the Telkwa river.

4. (b) Industrial Development.

Mines

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Climax Molybdenum Co. Ltd. continues in the exploration stage, for molybdenum.

Nadina Explorations Ltd., continue exploration for copper.

New Cronin_Babine Mines Ltd., active, with plans to increase production of lead_zinc, copper and silver.

Granisle Copper Ltd., Active, producing an average of 2200 tons of consentrated per day of copper with some gold and silver. Settling pond "B" is reported to be completed but not in use as yet.

Silver Standard Line continues exploration for silver lead and zinc.

Forestburg Collieries Ltd., active producing coal.

Inlet Explorations, inactive, placer operation on Bulkley river.

Other; a large part of the area around Telkwa river was staked out for coal leases. also Kluyatantan river area for future production of coal.

Several other mining interests in the exploration stage.

4. (b) Indust, ial Development. (Cont.)

Industry.

Bulkley Valley Forest Industries Ltd. are keeping up with schedule with completion of buildings on their site with the idea of being under cover for the winter months to install necessary machinery. Completion of roads within the site area and a road limites up the Morice river to a proposed bridge crossing of the Morice river. A bridge crossing near the highway and railroad crossing was completed. A new logging road was struck through to Babine lake near Topley Landing. Completion of an overpass over the highway near Fulton Channel, and completion of a bridge over the Fulton river.

Land clearing for the townsite to be called Mountain Véew was started, and a large land area for a shopping centre in Houston alongside the Buck river was readied, futher development to be completed on the latter in the near future.

At Smithers a branch from the natural gas line was struck through the Village. B.C. Telephone completed many miles of underground telephone cable along the highway and main valley roads.

The new bridge across the Bulkley river at Emithers was ompleted and opened during the year.

Further channel construction was carried out at Fulton river. Fish utilized part of the second phase of the channels. Building construction was carried out at Fulton and Pinkut.

4. (c) Obstructions and river diversions

Stream clearanceduring the year was mainly consentrated on removal of beaver dams and log jams in the Upper Copper river, Bulkley and Morice river areas. 110 beaver dams and 17 log jams were removed. Over 300 man hours were expended at a cost of about \$1500.00. In the Babine area beaver dams were opened for the passage of fish by patrolmen and F.R.B. personnel during the salmon runs.

Shegunia river diversion around fails at a cost of about \$2000,00 has been referred to region.

Beaver are still very numer to throughout the sub-district. If the coming spring run off is as light as expected, the beaver this coming year will be a bigger problem than ever.

4. (d) Gravel removal

Several enquiries were made during the year but in most cases plans did not develope or alternate sites were used.

The Village of Houston removed gravel from the stream bed of the Buck river where it passes through their development site. The gravel was removed in off season and used to build up and reinforce the river banks.

4. (e) Loggian operations

There are two main logging operations in the area; Bulkley Valley Forest Industries Ltd. and Northern Interior Forest Products Ltd.

Valley

It is rumored that Bulkley/Forest/Industries Ltd.
have taken over most of the holdings of Northern Interior
Forest Products Ltd., and that Northern Interior Forest
Products Ltd. mill at Telkwa will be phased out sometime
during 1970.

There are a few small sawmills scattered throughout the area, mostly milling private timber or on contract to the larger companies. The largest of these is the Dielman Planer Co, Ltd., situated in Smithers.

Bulkley Valley Forest Industries Ltd. plan to start operating their new mill early in 1970. To date they are still busy with mill, road and bridge construction.

The mild winter weather has curtailed logging, most operations did not start their winter logging untill near the new year. Stock piles of logs are reported to be very low.

Area (out for 1969. (Forestry figures)

Hazelton:			6 6 66	aor	9B ,	16660000	cubic	feet.	
Smithers:			2896	n		14602000	Ħ	н .	,
Houstons	,		1270	Ħ	•	7673000	Ħ	н .	,
Pendleton	Bave	No	figur	res.	Curt	negligable	this	vaar.	

4. (f) Water licence applications.

During the season nineteen water licence applications were processed and inspected, of these one screening inspection was carried out and found satisfactory. One diversion ditch without screening, out of Toboggan lake, was ordered closed.

4. (g) Placer mining applications.

One application, for renewal of lease, for two placer leases that had expired were processed. Two inspections were made of these leases, held by Inlet Explorations Ltd., on Mudflat creek on Bulkley river, no activity was observed.

5. Trends in the Fishing Industry.

Not applicable in this sub-district.

6. Enforcement.

(a) Commercial. N.A. Sport. Nil.

Indian Food Fishery.

Six violations were prosecuted in the Indian Food Fishery. Five cases resulted in convictions. One case was dismissed. Three convictions for illegal gaffing, one for illegal netting, one for possession of illegal caught fish for sale. One trial case of illegal gaffing was dismissed.

Other. The procedution for destroying salmon eggs was dismissed.

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6. Enforcement. (cont.)

- (b) Sport and Indian Food Fishery closures have been complied with throughout the area.
- (c) Irregular patrols by local Fishery Officers, area Sport Fishery Officer and patrolmen have held abuses to a minimum. With the antisipated addition of a river boat to the sub-district equipment, more and better patrols to closure areas with further reduce abuses.

7. Predators.

- (a) Sea Lions. Nil.
- (b) Hair Seals Nil.
- (o) Bears.

Area is abundant with both black and grizzly bear mmbers not determined - There were not any bear destroyed by
sub-district Fishery Officers or Patrolmen this year. There is
a heavy toll on bear in this area by sportsmen and farmers, which
seems to keep the bear population in balance. Fifteen grizzly and
fifty black bear were reported taken in the area by sportsmen.

- (d) Grayfish. Nil.
- (e) Killer Whales. Nil.
- (f) Other.

There is a heavy population of predator birds in the area. The past spawning season due to fair water levels, the predation on unspawned fish was light. The predation on fry and eggs by ducks and mergansers appeared to be high.

8. Administration.

- (a) Staff.
 - (1) A.M. Groat Fishery Officer LLI D.N. Meyers " II
 - (11) F.P.L. Babine River

(111)Three patrolmen were used in the area during the season. Stream clearance, Indian Food Fishery and area patrol being their main functions. One Master/Engineer for Patrol boat.

(lv) Staff efficiency was satisfactory with the exception of the seasonal Master/Engineer of the Babine River. This seasonal man after much time and effort spent to correct an unsatisfactory attitude was struck off strength permanently for this sub-district. The patrolman employed seasonal for the Moricetown canyon position was unsatisfactory for this position and was struck off strength permanently for this sub-district. The Morice river and Fort Babine patrolman were very satisfactory.

(b) Equipment.

- (1)
 2. 4 wheel drive vehicles. One 1964 ford pickup.
 One 1967 international panel.
 - 1. inboard-outboard patrol launch.
 - 1. 14 foot fibreglass speedboat.
 - 1- 22 foot, plank, lake work boat.
 - 1- 24 foot Plywood, lake work boat.

(cont. 9.)

(cont.) 8.(b) Equipme__

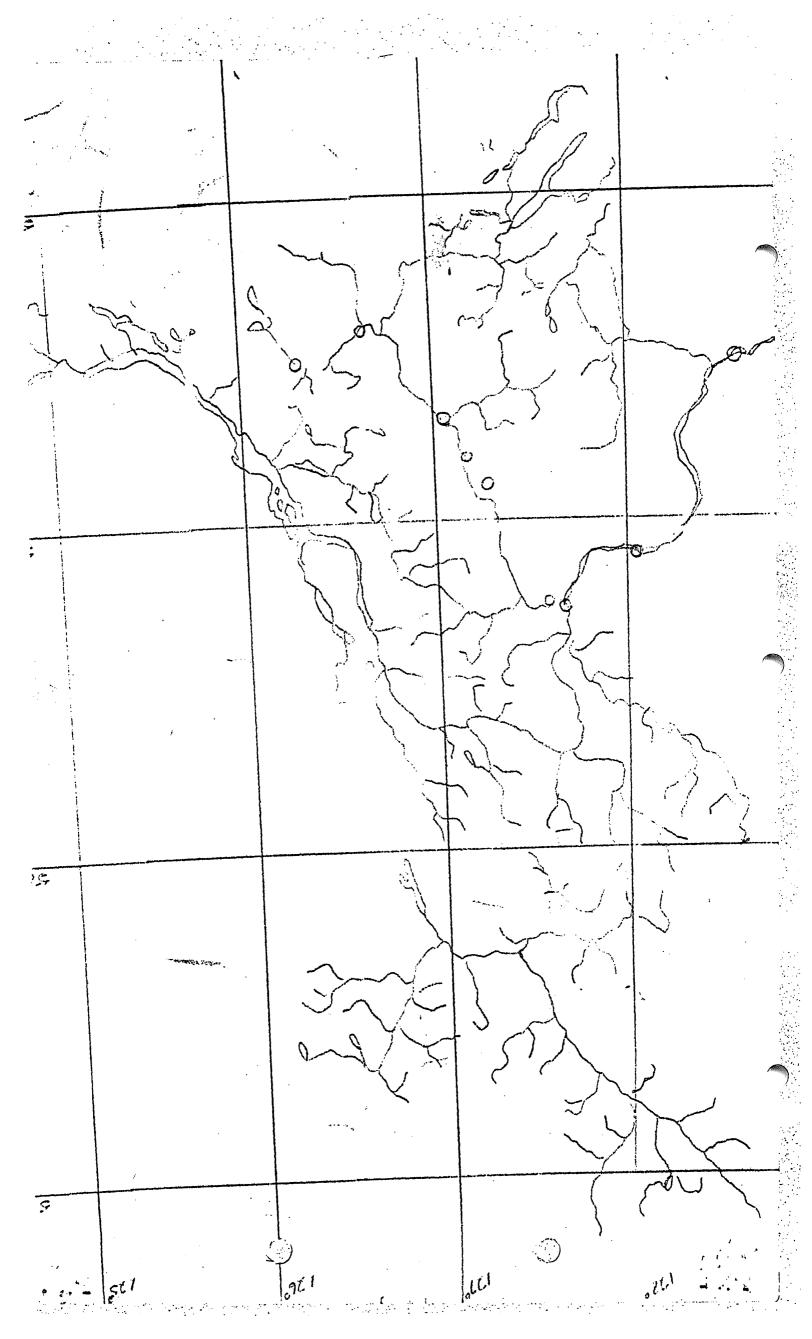
- 1- 12 foot fibreglass dingy.
- 1- 12 foot aluminum car top boat
- 1- 2 wheel boat trailer
- 1. 65 H.P. outboard
- 1-28 H.P. outboard (written off)
 3-40 H.P. outboards (One written off)
- 2- 18 H.P. outboards
- 1- 6 H.P. outboard
- 1- 6 H.P. outboard
- (11) All equipment was used extensively during the season. Due to the years in service, the amount of wear and hours run, the 28 H.P. and 3 40 H.P. outboards just barely sufficed to the end of the season. One 40 H.P. and the 28 H.P. outboard were written off.
 - (111) 2-40 H.P. outboards to replace the 28 H.P. and the 40 H.P. that were written off.
 - 1- 16 or 20 foot aluminum river boat. For river patrol.
 - 1. 16 or twenty foot trailer for river boat.
 - 1. 4X4 pick-up to replace vehicle 64-03.

Two way radio equipment in patrolmens cabins and in vehicles to expedite communications.

9. Informations, Education and Other Programs.

- (a) Many public relation visits were made during the year to industry and other organizations, mainly on polution education. Community meetings on polution were attended.
- (b) Much aid to school students given on the topics of Fisheries and pollution.
 - (c) Many contacts were made and cooperation given to: Towncountills. Health and Welfare. Fish and Game Branch. Department of Public Works. Canadian National Railways. Department of Forestry. Indian Affairs. Government Agent. Department of Transport. Water Board. Hrd.C. A.R.D.A. Fisheries Research Board. Resource Development Branch.

Fisheries Officer.



1969

ANNUAL REPORT OF SPORT FISHERY OFFICER

CONSERVATION AND PROTECTION

DISTRICT #8

- General Description of Area
- Sport Fish Catch Estimates
 - 1. Fresh Water
 - 2. Tidal Water
- C. Effort
- District 8 Special Regulations
- Marrative Sport Fishery
 - 1. Prince Rupert Area

 - 2. Terrace Area
 3. Smithers Area
 4. Hass Area

 - 5. General
- F. Gear
- Administration

 - 1; Staff
 2. Equipment
- H. Recommendations

A. General Description of Area

District #8 includes the watersheds of the Skeena, Nass and Stikine (Canadian) Rivers, and tidal areas 3, 4, and 5. The sport fishery studied this year included only the fresh water fishery as this is where the greatest amount of angling for salmon in district #8 takes place. The largest part of the effort is on the Skeena, but there is a small and fairly successful fishery on the Nass. The fishery on the Stikine was not looked at this year as the river is remote and the fishery is apparently negligable. The Prince Rupert area takes in the Skeena and tributaries below Kwinitsa, Kloiyah Creek, and tidal area 4. The Terrace area takes in that part of the Skeena watershed from Kwinitsa up to and including the Kispiox River. The Smithers area covers the rest of the Skeena system and the Bulkley system above the Suskwa River.

Fishing pressure in district #8 is increasing each year from both local and tourist anglers. Provincial and private forestry access roads are opening up more and more country to anglers each year and new industry is bringing an increase to local populations. An example of new industry is the pulp mill at Houston on the Morice River which will start production in 1971. Already an increase in population can be seen with construction workers coming to the area, and the number of access roads in this area will also increase. These reasons as well as the improvements on highway 16 and the increasing popularity of the fishery indicate that angling pressure will increase considerably in the next few years.

The following table of local populations is included to indicate where local pressure originates. The table is based on 1967 census reports, and some figures may be slightly adjusted.

Figures include surrounding areas.

Prince Rupert	20,000	
Terrace	16,000	
Kitamat	12,000	
Hazelton	700	
Smithers	5,000	
Telkwa	800	
Burns Lake	1,500	
Ness Watershed	5,000	(Stewart - 600)

B. Sport Fish Estimates

1. Fresh Water

Area	Chin	Chinooks Coho						
	under 5 lbs.	over 1969	5 lbs. 1968	jacks	- 1969	1968		
Prince Rupert	56	30	*	0	50	*		
Terrace	435	800	1,710	0	1,075	850		
Smithers	580	545	2,180	70	585	1,500		
Nass	105	180	*	0	250	*		

* No figures available

The table on the following breaks these estimates down to individual angling streams.

Sport Fish Estimates continued

Some rivers have a total of 0 fish taken, these rivers have produced salmon to anglers in the past, but not this season.

25 jack chinooks jack coho
Fractions such as 30 refer to chinooks or coho

- T .	actions such as			,0	CHILIC	OKS	•	J1. (30110			
LO	CATION :	CHINOOKS				тН	COHO					
		June	July	Aug.	Sept.	Total		Aug.	Sept.	Oct.	Nov.	Total
. 1.	Prince Rupert Kloiyah Creek	0	<u>25</u> 10	<u>25</u> 15		<u>50</u>		50	0	0	0	50
	Johnston Creek	. 0	0	15 6 6	0	<u>50</u> 25 <u>6</u> 6		.0	0	0	0	0
			0	0	-	0						
	Terrace			-1.		204						
	Lower Skeena	0	<u>240</u> 305	145 120	. 0	385 425		35	80	55	0	170
	Upper Skeena	0	10	80	0	90		60	150	20	0	230
	Kalum	150	0	10	0	160		0	5	20	0	25
	Lakelse	15	0	10	0	25		0	60	80	0	140
	Copper	0	25	10	0	35		20	30	40	0	90
	$Z_{ t imicord}$	0	0	0	0	0		0	0	0	0	0
	Extew	0	0	0	0	0		0	0	0	0	0
	Exchamsiks	0	0	0	0	0		0	10	10	0	20
	Kasiks	i o	0	0	0	0		0	15	10	0	25
	Gitnadoix	0	0	0	0	0		10	120	25	0	155
	Kitwanga	0	0	<u>50</u> 20	0	<u>50</u> 20		0	40	10	0	50
	Kispiox	0	5	40	0	45		10	120	40	0	170
3.	Smithers											
	Bulkley	0	<u>350</u> 312	230 138	0	<u>580</u> 450		<u>70</u> 225	150	25	0	<u>70</u> 400
	Morice	0	50	45	0	95		50	0	75	ó	125
	Telkwa	0	0	0	0	0		0	10	0	0	10
	Babine	0	0	0	0	0		0	0	50	0	50
4.	. Nass											
	Ishkheenickh	<u>20</u> 0	<u>10</u> 65	0	0	<u>30</u> 65		0	10	40	0	50
	Tseax	0	7	10	6	23		0	0	30	100	130
	Kiteen	0	5	2	0	7		0	_0	0	0	
	Cranberry	0	7 <u>5</u> 25	12	0	7 75 37		0	114	60	0	7
•	Meziadin	0	9	24	4	37		0	0	0	0	
	Seaskinnish	0	0	0	0	0		0	0	0	0	
								• •				

Sport Fish Estimates continued

2. Tidal Water - Information from sub-district officers.

20/0	P	Prince Rupert Grenville-Principe Area 4 Area 5				Nass Area 3			
1969 Month	Chinook	coho	Catch per Boat Day	Chinook	Coho	Catch per Boat Day	Chinook	Coho	Catch per Boat Day
Peb.	17	0	• 37	0	0	-	0	0	-
March	45	0	•25	12	0	1.2	11	0	•33
$A_{ t pril}$	215	, O	.61	20	0	2.0	36	0	•30
Nay	175	Ó	.45	0	0	-	125	0	.80
June	118	8	•68	0	0	-	20 ⁻	0	.22
July	140	60	•56	0	0	-	3	0	•15
Aug.	55	95 ^{.:}	.25	0	5	2.0	0	0	-
Sept.	. 12	40	•75	0	15	3.3	0	0	-
Oct.	14	10	•45	0	0	-	0	0	-
Nov.	7	6	•65	0	0	-	0	0	. -
Dec.	0	0	0	0	0	-	0	0	
Total	798	219	-	32	20	-	195	0	,
58	795	585	-	8	6	-	181	0	-

Area 4 has the largest tidal sport fishery in the district as this is where the main part of the coastal population occurs. The effort is mainly concentrated in the harbour area, Metlakatla Pass, Tuck Inlet, and Fern Pass.

The effort in area 3 occurs mainly in Fortland Canal (Stewart area) and Alice

Most of the angling in area 5 is in Kitkatla Inlet and vicinity by local natives, and Lowe Inlet is fairly popular with transients (mostly American).

C. Effort

Effort for salmon on the Skeena was approximately the same throughout the entire system.

Week	Angler hr. Chinook	Angler hr. Coho	Week	Angler hr. Chinook	Angler hr. Coho
July 6 - 12	50	-	24 - 30	_	27
13 - 19	37	-	31 - Sept. 6	_	25
20 - 26	29	-	7 - 13	_	13
27 - Aug. 2	79	-	14 - 20	_	13
3 - 9	160	-	21 - 27	: <u>-</u>	13
10 - 16 Hig	h water, litt	le effort.	28 - Oct. 4	_	15
17 23 Hig	h water, litt	le effort.	5 - 11	_	15
			12 - Angling	for salmon v	irtually nil.

D. District #8 Special Regulations

1. By Regulation

a. Closures to Fishing

Morice River between Lamprey Creek and Morice Lake from March 1st. to May 31st.

b. Closures to Fishing for Salmon

Morice River and its tributaries between Lamprey Creek and Morice Lake from August 15th to May 31st. 90×30

Tseax River, a tributary to the Bass River, upstream from the highway bridge near Spencer Lake from August 1st. to December 31st.

Babine River including Nilkitkwa Lake or tributaries of that river or lake lying between fishing boundary signs placed in the vicinity of Fort Babine at the mouth of the Nilkitkwa River from August 15th to September 20th.

Kitsumkalum River and Kitsumkalum Lake or their tributaries above the lower canyon, which is located immediately north of the mouth of Deep Creek and designated by fishing boundary signs, from August 10th to September 30th.

c. No Use of Boats when Angling

In the Kispiox River or within one hundred yards of its mouth.

In the Moricetown canyon or within one hundred yards downstream of the canyon.

d. No use of fish roe or any compound of fish roe and oil while angling

In the Morice of Kisptox Rivers or their tributaries.

2. By Notice

a. Closures to Fishing

Pinkut Creek and Fulton River artificial spawning channels from August 15th until October 15th.

b. Closures to Fishing for Salmon

Ishkheenickh River from August 1st. to September 15th - for the protection of spawning chinooks.

Kloiyah and Diana Creeks from September 5th to October 12th - for the protection of spawking chinooks.

1. Frince Rupert Area

There are only two fresh water sport fishing locations in the Prince Rupert area utilized. These are Kloiyah and Johnston Crocks. For convenience, that portion of the lower Skeens in this area is included in the Terrace - lower Skeens estimates.

There is only a small fishery on Johnston Creek for chinooks as it is in a fairly remote location. Kloiyah Creek has a fairly large sport fishery with a guardian located here to patrol the fishery and collect data as well as his other related duties. Information from his reports indicates that between June 21 and S_{e} ptember 5 (when the closure to protect spawning chinooks took effect) there was a total of 525 angler days on this stream or approximately 2100 hours of angling effort.

Almost 100% of the anglers were from Prince Rupert as this is the only fresh water fishing location within easy reach of Prince Rupert.

2. Terrace Area

The major chinook fishery here is located at the mouth and just west of the mouth of the Kalum (Kitsumkalum) River in the Skeena. The large majority of anglers here are American. A good number of them spend the entire season camped at Fisherman's Park just west of Terrace. During the season, which lasted 38 days (chinook run) from July 10th until August 16th, 330 chinooks (over 5 pounds) and 300 (under 5 pounds) were taken from this particular location with 18,500 angler hours to take them.

The rest of the lower Skeena (below Terrace) also produced a fair number

of chinooks to anglers but here again the effort per fish taken was very great. The tributaries of the lower Skeena, the Kalum, Lakelse, Zimicord (Zymagotitz), Extew, Exchamsiks, Kasiks, and Gitnadoix Rivers produced almost no chinooks (from the main run) to anglers as the water conditions kept almost 100% of the effort in the Skeens, usually at the mouths of these tributaries. The early run $(J_{\rm une})$ into the Kalum produced a fair number of chinooks to anglers. Host salmpn taken from this run are taken from the top-end of the Kalum River and the top-end of Kalum Lake.

The upper Skeena (above Terrace) and tributaries, the Copper (Zymoetz), Kitwanga, and Kispiox Rivers produced a small number of chinooks to anglers, but here again the water conditions and poor weather kept the catch and effort

at a low level.

The coho fishery in the Terrace area was also very spasmodic and varied considerably with water conditions. The effort for coho was largely from local anglers, but a fair number were taken by tourist anglers who were drawn to the area by the steelhead fishery. Very few were taken in the Skeena except at the mouths of its tributaries. The effort on the lower Skeena was almost entirely at the mouth of the Exchamsiks River, and in the Gitnadoix and Lakelse Rivers. The Gitnadoix produced a considerable number of coho for a small amount of effort. This river is fairly remote and unknown to most anglers, especially tourist anglers, and the few who did fish here very seldom went home without their limit. The Lakelse River also produced a good number of coho, but here the river is well known and is easily accessible which raised the effort to 13 - 15 hours per coho, and most anglers went home empty handed.

Most of the coho taken in the upper Skeena were taken in the Skeena in the vicinity of the Kitwanga and Bulkley Rivers. The Copper and Kispiox Rivers produced a good number of coho to anglers, but in these rivers most of the effort is directed at the steelhead and any coho taken are incidental.

3. Smithers Area

This season the chinook fishery in the Smithers area took place on the Bulkley and Morice Rivers. The greatest amount of pressure on the Bulkley was at Moricetown canyon where approximately 375 of the 450 chinooks (over 5 pounds) from the Bulkley were taken. The guardian who is stationed here enumerates the sport catch in this one important location as part of his duties. The rest of the effort on the Bulkley was at the mouths of its tributaries, the Suskwa, Liorice, and Telkwa Rivers and at Trout Creek. There is a small amount of effort scattered along the Bulkley, but very little. The largest effort for chinooks on the Morice River is just below Miorice Lake. Anglers camp on the shore of Morice Lake and by boat attain access to the top-end of the river where angling is fairly good. The chinooks are protected in this section of the river by the annual closure to salmon angling from August 15th to September 30th. Most chinooks arrive in the Babine and Nilkitkwa Rivers after the annual closure to salmon angling takes

Narrative - Smithers Area continued

effect on August 15th to protect them on the spawning grounds. As a result the only chinooks taken after the closure lifts on September 30th are usually released as they are in very poor condition this late in the season. The few that were taken, and a few were taken in this condition, would be negligable this season.

The effort for coho in the Smithers area occurs in approximately the same locations as the chinook fishery. The Bulkley produces most coho to the anglers, and most of these are taken at Moricetown canyon. Coho angling on the Morice is spread out along the lower portion of the river instead of the top-end as in the chinook fishery. There were a few coho taken in the Babine and Nilkitkwa Rivers after the closure lifted. These few coho are taken mostly by local anglers as the major tourist fishery in this area at this time of year is for steelhead. The top of the Copper River is accessible from Smithers and is utilized by a few locals who take a few coho in the fall. There is a fishery on the Sustut River by tourist anglers from a lodge on Bear Lake. No information is available on this fishery, but records indicate this is a major chinook spawning area on the Skeena system.

There are a few local anglers that fish the Salmon (Shegunia) River and a small number of chinooks and coho are taken here. There was approximately 50 angler days in this area for the season.

4. Nass Area

The sport fishery in the Nass watershed is becoming more popular to anglers each year as the pressure builds up on more accessible areas such as the Skeena. A large amount of pressure comes from the local logging camp populations as this is one of the few recreational activities available to them. The most popular and well known river in the area is the Ishkheenickh. This river also attracts a good number of tourist anglers and produces chinook salmon with considerably less effort than on the Skeena system. There was a closure on the Ishkheenickh from August 1st. to September 15th to protect the chinooks while they are spawning. The Tseax River is also closed from the highway bridge up from August 1st. to December 31st. for protection of coho and chinook salmon on the spawning grounds. Even with the closure on the Tseax a good number of salmon are taken below the highway bridge. The Kiteen and Cranberry Rivers are popular with local anglers, and later in the fall hunters stop here to fish for coho. The Meziadin Niver is inaccessible to most anglers except the local population of Stewart. It appears that hours of effort per salmon in this location is considerably less than in any other location in district #8. A bridge will be built over the Nass River in the near future which will make the area readily accessible to all anglers. This new bridge will greatly increase the pressure from locals, and sport reports on local radio stations in Terrace will inform the tourist anglers of this new developement.

In general, the effort in the Hass area was less than elsewhere in the district, but the catch per effort made was greater.

5. General

The weather conditions in district #8 this season were exceptionally poor and this has had a very noticeable effect on angler success. When the water in the Skeena and tributaries was high and turbid the success of the anglers dropped and as a result the number of anglers dropped. The largest chinook taken by an angler this year was 68½ pounds. The average weight of the chinooks (over 5 pounds) this year was approximately 50 pounds.

There is a growing rivalry between local and tourist anglers for preferred fishing locations. The number of tourist anglers has increased greatly each year for the last few years and is expected to increase again next season. The biggest problem seems to be the increasing number of power boats concentrated in the Terrace area which prevents shore angling in a number of preferred locations. At the peak of the chinook fishery this season, there were 45 power boats concentrated on the Skeena River just west of the mouth of the Kalum River.

F. Gear

Throughout the district the method of angling for chinook salmon was (almost 100%) by the use of artificial lures. Host of the anglers used the lures for spin casting, but occasionally an angler would keep his rod in a fixed position and allow the lure to flash freely in the fast water. The most popular lures used (the most successful lures) were the "KITTA-MAT" and "SPIN-N-GLOW". The anglers that fished with bait, usually roe, had little success catching the larger chinooks, but were very successful in catching jack chinooks and trout.

Angling for coho in the Skeena was usually with bait(roe) as the water was high and turbid most of the summer. Spin casting with artificial lures was successful in the Skeena at the mouths of its tributaries and in these tributaries where the water was less turbid. Popular lures for the coho were again the "KIT-A-HAT" and "SFIN-N-GLOW", and also the "TEE SPOON" and the "KROCODILE".

The "KIT-A-MAT" and "KROCODILE" are simple flasher type lures which trail a treble hook. The colors of the "KROCODILE" varied considerably, but the color of the "KIT-A-MAT" was almost always flourescent red with silver. The "SPIN-N-GLOW" is a simple flourescent red or green (or both) oval ball which is spun in the water by white, plastic wings. The "TEE SPOON" is fairly common and well known, it consists of a treble hook, a series of golf tees and a flasher.

The larger chinook salmon seem to have little trouble breaking the hooks and eyes of these lures, and as a result more anglers are replacing factory hooks and eyes on the lures with heavy-duty type hooks and eyes. The chinooks have little or no chance of breaking these reinforced lures.

G. Administration

1. Staff

The sport fish officer, N.J. Lemmen (T.I.R.L.), comes under direct supervision of district protection officer J.W. Connor.

Co-operation with the sub-district officers throughout the district is essential as these particular officers are in their areas all season and the sport fish officer is not. Co-operation with Frovincial Fish and Wildlife has also been found to be of value to the sport fish officer.

2. Equipment

Vehicle #69-104 satisfactory
14 foot Smokercraft (speedboat) satisfactory
Boat trailer satisfactory
Binoculars (7 X 50) satisfactory
A 20 H-P, motor and a 5 gallon fuel tank were borrow

A 20 H.P. motor and a 5 gallon fuel tank were borrowed from Area 4 as no motor was supplied for this position this year.

H. Recommendations

District 8 covers a large area, and a great amount of the sport fish officer's time is spent travelling from one location to another and therefore any information gathered is scattered and can only be presented as estimates. It would be little effort for each guardian and fishery officer in the district to mark down on paper a useful, consistant type of information regarding the sport fishery, as these guardians and officers are generally in contact with anglers each day. To keep this information useful and consistant a simple form can be used such as sheet #1 (following page) for individual interviews and sheet #2 (2nd page following) for weekly estimates on their streams. Possibly a small booklet type form can be drafted up for this purpose or perhaps a type of creel card could be used. This would be of great benefit in areas where there is only a small and scattered fishery, as the amount of time the sport fish officer can spend in this type of area is almost nil. This would free the sport fish officer to spend more time in concentrated and problem areas, and in areas where there are no guardians. He would also have more time to spend on the law enforcement side of the sport fishery. The sport fish officer could contact each sub-district officer once a week to obtain his guardian's information or when this is not possible he could obtain the information from the sheets which could be attached to the guardian's reports each week. The collected information could then be presented in his own weekly report as a fairly accurate and consistant type of information.

The extra load on the guardians could be coupled with extra vehicle milage in areas where it would be required to carry out the extra work. This extra milage would possibly aid them in their regular work also. For example, in Hazelton the guardian covers the Kitwanga area on his regular patrols. There is a considerable fishery at Kitwanga but it is very spasmodic and special trips in by the sport fish officer generally produce very little. The guardian at Hazelton is in a position to know what is going on here and cover this fishery as well as his other duties, but he lacks sufficient vehicle milage to make enough trips to this area. This system would also work very well in the Nass area as the fishery here is also very spasmodic and spread out.

With the greatly increasing number of anglers to the north country c system such as just outlined should be initiated as the district does cover a large area, and accurate information will be required to manage this fishery.

There seems to be a general feeling amoung the local anglers, subdistrict officers, and provincial conservation officers in this district that some sort of an enforceable tag system be initiated for the protection of salmon. There is no means at this time of determining how many spring salmon any one person takes, asonce the salmon is canned or disposed of in some other manner there is no means to account for them. A reasonable restriction should be put on a maximum number of salmon taken from fresh water by any one person.

There is a problem with the killing of pink salmon on the Lakelse . River for roe. As suggested by F.O. Bogart, a ban on the use of roe should be initiated on this river during the pink salmon run.

The chinook fishery on the Sustut River should be looked at in the future as this fishery, although remote, is located in an important chinook spawning area.

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SHEEL #1

LOCATION:

KECOED OF ANGLERS INTERVIEWED

No. in PARTY Men Women Children Fish Taken Weather Other Comment No. hours Fished

SHEET #2

Weekly Estimates of SPORT CAUGHT FISH

CONSERVATION DISTRICT #8 FRESH WATER

			11111	II WALLEL	
•					
असम्ब	OF •				

WEEK OF:				-		
AREA.	SPRINGS	СОНО	OTHER	Estimated #anglers/day	Ave. hrs./day	
1. Area 4 Kloyiah						
Johnston						
2. Terrace Lower Skeena						
Upper,Skeena				1		
Kalum						
Lakelse				j _		
Copper						
$\mathrm{z}_{\mathtt{imicord}}$						1
Extew						
Exchamsiks		! !				
Kasiks						
Gitnadoix						
Kitwanga		:				
Kispiox.						
3. Smithers Bulkley		<u> </u>				
Morice						
Telkwa						
Babine						
Suskwa						
Sustut (Bear)			1			
4. Nass Ishkheenickh						
Tseax					·	
Katine						
Cranberry						
Meziadin						
Seaskinnish						
*		1				
	•					