

Smithers, B.C.  
January 14th. 1953.

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The Regional Supervisor of Fisheries,  
Prince Rupert, B.C.

Herewith please find my annual report of the Fisheries in  
the Babine - Morice area for season 1952.

A. TREND OF THE SEVERAL FISHERIES.

On Babine Lake a total of 34,690 salmon were taken by Indian Fishery in comparison with 19,204 for 1951; 27,249 for 1950 and 28,524 for 1949. This year, as was the case last year, there was considerable wastage of fish which were unfit for food purposes and were discarded due to the damage, fungus or over ripeness. This wastage was estimated at at least 8,000 in comparison with about 3,000 last year. This wastage was the heaviest in the Lilkitkwa Lake area and became progressively less towards the upper end of Babine Lake. Although individual fish catches per Indian were comparable to other years, economic conditions were such that many more Indians fished with the result that it compares more with the years 1941 to 1944.

At Moricetown Canyon this year Indian Food supply catch reached a new low being a total of 3,252 salmon. This is the lowest catch of any records I have. It is not known if this figure is significant with the total run passing through as we were unable to get an estimate of the Sockeye spawning on the Nanika River. As was the case last year salmon did not conjest in the Moricetown canyon which was attributed to the successful operation of the fishways. Indians did not seem to be interested in fishing and did not worry about getting their fish up, as excellent dry weather prevailed during the peak of the runs and so the Indians spent much of their time haying. When they got around to fishing the runs had passed. There were some complaints about the fishways heard at this time.

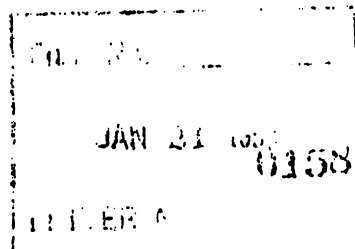
In the Bear Lake area Indians did very well by taking about 300 sockeye, 750 springs and 200 Coho being a total of 1,250. It was also noted that the Indians took a number of large charr.

Sports fishing on Babine Lake was not quite as good as last year although some good catches were made. One camp was erected near Fort Babine to cater to sports fishermen and several private fishing camps were erected near Halifax for sport fishing on Babine Lake. These latter camps are at the terminus of a new road pushed through this summer from Smithers to Halifax on Babine Lake.

In other parts of the area sports fishing was average and sportsmen reported some good catches of Coho and steelhead in the Bulkley River, Moricetown Canyon, Trout Creek, Telkwa and junction of the Bulkely and Morice Rivers, seem to be the favourite fishing places.

B. CONDITION OF FLEET OF FISHING VESSELS.

As there is no commercial fishing in this area we have no conventional fish craft. Most boats used are of the flat bottom or dug out type. There were a few new boats added this season while a few more old boats were discarded. The general condition of the boats are improving with gradual increases in total numbers.



## C. DEVELOPEMENT OR CHANGES.

The Fish Culture and Developement Branch were again quite prominent in this area with the following projects.

1. The building of a road into the Babine River Obstruction under Engineer J.B. Dyson continued all summer.
2. A tagging operation under Biologist J. Stokes placed tags on some 16,000 salmon both at Kisgegas Canyon and at the Slide itself. Tags were afterwards recovered from areas downstream and up stream, about 600 tags being recovered from the Babine Lake area.
3. Some work was done at the slide to assist the salmon.
4. Considerable engineering data was obtained on the slide with the view to its removal.
5. In the latter part of the year a contract was let to General Construction Co. of Vancouver to remove this slide.
6. Some work was done at Moricetown Fishways to try and put them in condition.

The Fisheries Research Board operated the Salmon counting fence in the lower Babine River making the following counts of salmon passing through this season.

Sockeye	376,947
Spring	5,915
Chum	10,554
Pink	2,704
Chum	1
total	396,123

The Fisheries Research Board personal assisted greatly in making dead counts and obtaining data regarding tags and unspawned fish.

Captain R.C. Mercer and crew worked on the F.P.L. Branta doing engine work, carpenter work and painting. The Boat house, oilshed and wood shed were each given a coat of paint and the appearance of the Station has greatly improved.

A new boat was purchased to replace the Old Babine 1. It is of the regular river and Lake type, peculiar to this area, and has been named the Babine 1.

A new Peterborough "Falcon" canoe was put in service for the use of the Inspectors. It is light enough to be carried on the top of a truck and sturdy enough to take up to a 10 H.P. outboard motor. It was found quite satisfactory.

The road into Donald's Landing Station had some work done on it which has helped considerably in getting in and out during adverse conditions. However, a lot more work could still be done on it.

The fishways at Moricetown were being worked on in the fall of 1951 and work had to be suspended because of ice conditions. This spring there was still much ice on them and it was only possible to replace about one third of the grates when the high water came. This condition existed almost all summer, debris had caught up in the fishways and some concern was felt for their efficient operation. They were also very dangerous to Indians and sightseers walking around them.

A new Mercury M3 truck #52-14 replaced Ford Panel truck # 49-2 on October 20th.

## D. ABUSEMENTS.

There were very few abusements this season and nothing that required legal action.

## E. CLOSE SEASONS.

Weekly close seasons were well kept this year and no difficulties were encountered in enforcing them.

## F. STEPS TAKEN FOR PREVENTION OF ILLEGAL FISHING.

A Guardian was stationed at Moricetown Canyon to take counts of Indian food supply catch, to prevent illegal fishing and the sale of salmon by Indians, to regulate fishing and to inspect several spawning grounds.

On Babine Lake a patrolman was stationed at Fort Babine to prevent illegal fishing, count Indian food supply catch, repair equipment and buildings, to make creek inspections and this season got information and sent telegrams daily on the passage of salmon through the Babine River counting fence.

A Master Engineer was employed on the F.P.L. Branta doing excellent work.

Two Inspectors in the area carried out patrols by foot, car, boat and by aircraft.

## G. THE PROTECTION OF WATERS FREQUENTED BY FISH.

A check of sawmills throughout the whole area is constantly being made with the most emphasis being made during winter months when the roads are better.

The following were the major mines in the area, Sil-Van had reached a point in the construction of their new mill when they would have been able to start milling very soon when they were notified to shut down. The Glacier Gulch just folded up. The Cronin Babine Mine operated for two or three months and were forced to shut down for reasons beyond their control. This mine may cause us some trouble as they do not have a very good tailing disposal area and there is a chance that these tailing may enter salmon and trout streams. This is being closely watched.

## H. CONDITION OF FISHWAYS.

The fishways at Moricetown, which were being worked on in the fall of 1951 and its completion prevented by high water and ice, were again hindered from having all the grates replaced by ice and high water last spring with the result that debris etc. became lodged in them and their efficient operation was questioned, the grates not all being replaced at the end of this season.

## I. SPAWNING CONDITIONS.

## SCKEYE

In the Bulkley River system sockeye arrived a little later than usual at Moricetown Canyon. A check was not possible this year on the spawning beds of the Nanika River and therefore we do not have any definite indication of what the run was like. The Indian Fishery was very low this year but as they were more interested in putting up hay than fishing no indication can be obtained from this. Those fish examined seemed to be in very good condition and of a large size.

# L, Spawning Conditions continued.

At Bear Lake we were again very disappointed with the run. The Streams just did not have any salmon in them and no redds were visible. The Area had extremely low water but was back to normal by the time of our visit. This season we were very fortunate in making two visits to Bear Lake Beach Spawning and found that there was much more spawning than we had anticipated and that this spawning had continued over a considerable period of time.

The Fisheries Research Board have given us totals of Sockeye passing through the Babine counting fence at 376,947 but this figure certainly does not mean that this number effectively spawned. Water levels were very low on Streams but the spawning area available to them was more than adequate for the numbers that made use of them. Some streams, such as Wiggins, Cross, Sockeye, Tachek and Five Mile, the conditions were such that salmon were unable to enter. If Sockeye had arrived, as in past years and began spawning at the end of July, they may have been able to use the above streams as water conditions were then fair. The General condition of the sockeye were very poor with many dying unspawned. The Fish Culture and Development Branch and the Fisheries Research Board are now compiling data on the results of this years run. This was obtained from tagging, samples, marked dead and general observations. We feel that the seeding was poor for the number of salmon passed over the slide.

## SPRING.

The run of Springs to the Babine River was again light, 286 were taken by Indian Fishery and the balance spawned out moderately well on the Lower Babine River. At Bear Lake there was a moderate run of large fish sexes about even. The run up the Bulkley River was about as usual but low water ~~pre~~prebented them from using their usual spawning areas. On the Morice River there was a little heavier run than last year. In general there was a moderate run of good sized springs to the area.

## PINKS

2,704 Pinks passed through the counting fence in the Babine River and estimate as many more spawned below the counting fence. We were able to give very little attention to the effectiveness of their spawning. This is the first season that I have been able to locate where the Pink~~x~~ salmon were spawning in the Bulkley River since the installation of the fishways at Moricetown, although the numbers were few they should increase. Low water is considered the reason that there wasn't a greater run to the Bear River area, but the run there would compare favourably with the cycle year.

## COHO

There was a medium run entered the area and spawning was very good. On the Bulkley River low water kept them from going as far up stream as they usually go making it seem as though there was a much greater run than there actually was. This was the largest run to the Upper Bulkley River I've seen. I was able to cover the local coho streams quite good but was unable to cover the outlying areas, all visited had a medium run and would compare well with the cycle year. 10,554 Coho passed through the counting fence in the Babine River, comparing with 2,122 last year. They seemed to make the journey up the

I. Spawning Conditions continued. Babine River without too many casualties. At Bear Lake we were unable to get an idea of the size of the run as we were too early and only saw one large school on their way up the River. All Coho examined were of large size with sexes about even.

#### CHUMS

One Chum passed through the Babine River Counting fence. A few were observed near Hazelton in the Bulkley River.

#### STEELHEAD

The Smithers Rod and Gun Club believe that the trout they have planted in the Bulkley River system are now returning to the area as steelhead. Some excellent catches were made this season. The run in general will compare favourably with the past year.

#### DOLLY VARDON

This predator abounds in the lakes and streams of this area. They become good sized and many sports fishermen like fishing them, many even prefer eating them to trout when they are caught while very firm.

#### J. GUARDIAN SERVICE.

The Guardian Service in the Babine - Morice area is comprised of a guardian at Moricetown Canyon, a Patrolman at Fort Babine on Babine Lake and a Master - Engineer on the F.P.L. Branta.

#### K. SUMMARY

The large rock slide, which came down in the Babine River about July or Aug. of 1950, about 8 miles above Kisgegas Village, blocking the 1950 run so that only about 150,000 sockeye reached the Babine River Counting fence, was worked on this season so that 345,947 sockeye or a total all species of 396,123 passed through the counting fence. Of this number of Sockeye many were badly damaged and many died unspawned so that the final results may not be any better than last year. Water levels were extremely low for the late arriving salmon. A Jeep road was made into the slide area so that this season a tagging operation took place at Kisgegas Canyon and at the slide, recovery of the tags being made below the slide and at Babine Lake.

Very low water prevailed throughout the entire area with a number of streams being so low that salmon could not enter. This is the only way we can explain why the salmon did not enter the streams of Bear Lake. Salmon were unable to ascend the Upper Bulkley River nearly as far as in past years.

Lake spawning at Bear Lake proved very interesting as it continued over a considerable length of time making us change our estimates to conform. Lake spawning in Babine Lake was practically negligible although many dead were recovered in Nilkitkwa Lake, most of which were unspawned.

The Department owned truck was used to transport supplies and to facilitate the inspection and control of the area.

W.K. Elliott  
Fishery Officer.

WEATHER CONDITIONS.

Snowfall was heavier and temperatures colder than normal in the Winter of 1952. Snow came early and covered all dry gravel before frost could penetrate it and little loss to Salmon fry was found from freezing.

The Spring run-off was late and gradual with no floods and during the time that fry were emerging from the gravel water levels were adequate and no loss found from this source.

During the summer and fall, when adult salmon were arriving, water levels were slightly below normal, but not as low as in 1951.

There was only one flash flood very late in the fall and this was not severe as there was enough snow in the hills to hold back the heavy rains, and little damage was found on spawning streams after levels had gone down. This flash flood was local to the Terrace vicinity and although water levels were high further inland they were not high enough to cause any damage.

Weather up to the New Year has been exceptionally mild with little snow and no cold weather to speak of. Water levels during this period have been well up.

SPAWNING GROUND SUMMARY.

A few of the smaller streams in the Hazelton vicinity, that are usually inspected by the Guardian in that part of the area were missed this year do to lack of a Guardian, but the rest of the area was well covered during spawning time.

Inspections to some areas were a little late due to bad flying weather, but in spite of this bad weather were inspected satisfactorily.

SOCKEYES.

The sockeye count on Williams creek and Schulbuchend creek of about 13,000 fish, does not account for the total run of 15,000 fish that went through the counting fence on Lakelse river, and although the local inspector made a few inspections of these streams, the figures used in this report are Research Board fence figures. The 3,000 difference added to the approximate total of 49,000 brings the total escapement of this variety to about 52,000 fish. This does not quite come up to the figure of 59,000 fish for 1949, but the difference was found to be in the Swan Lake area, which was overcrowded in 1949 and had only a good seeding this year.

The Cedar river in the Kitsumgalum area was not inspected this year owing to lack of time and weather conditions. This stream would be seeded this year by from 1,000 to 2,000 fish, as indicated by other Kitsumgalum streams. In all, I am of the opinion that this year's Sockeye seeding was satisfactory in the Terrace-Lakelse area.

SPRINGS.

Spring salmon is scattered and can not be estimated with any degree of accuracy, but indications from the Indian catch and from Sport-fishing show a slightly better than average escapement.

Coho.

The coho escapement of about 32,000 fish is only a figure on the streams from which an accurate estimate can be made. A number of streams in which this variety spawn are too silty for observation. This does not come up to last years figure of 34,000 fish, but is better than 1950 which was estimated at 19,000, and am sure is better than 1949 but have not a complete figure for comparison.

PINKS.

Pink escapement was very heavy, with 200,000 fish going through the counting fence on Lakelse river and spawning on the short stretch above the fence. The rest of Lakelse river was well seeded but not as heavy as the upper area and in all, about 1,000,000 fish were estimated to be on this river. Kitlinga river handled another 150,000 fish and with other smaller streams on which an estimate is possible would bring the total known escapement to about 1,170,000.

PINKS.

Spawning was heavy on the Kispiox, Zymoetz and Kitsungalum rivers but numbers could not be estimated. These rivers together with a few smaller streams that could not be estimated would add greatly to the total escapement.

CHUMS.

The chum run was very light this year with only about 1,500 fish actually estimated. This was about equal to the 1948 run for which year I have no complete figure, but much lighter than the 1951 estimate of 11,000 spawners.

STEELHEAD.

Steelhead run is only judged by the Indian catch and the sportsfishery. Catches by Indians were good, while catches by sportfishermen in the Kispiox, Lakelse and Copper rivers were better than usual.

SPORTFISHING.

There was an increase in sportsfishing this year due to general increase in population in the district.

Very good catches of Spring salmon were taken at the mouth of the Kitsungalum river, while Cohoe fishing in the Kitsungalum river itself was better than normal.

Troutfishing was good in all local lakes.

Steelhead catches were better than normal, fish being taken in Copper (Zymoetz) river during every month in the year except June and July.

INDIAN FISHERY.

The catch by Indians this year was heavier than in 1951 with the increase coming mainly from the Sockeye run.

100 permits were issued this year against only 67 in 1951.

The figures from this fishery are as follows:

	1952.	1951.
Sockeye	9,035	6,628
Springs	995	730
Cohoe	835	1,072
Steelhead	508	468
Pinks	1,720	1,710
Chums	175	81
Totals	13,360	10,689

VIOLATIONS.

No violations were found in fishing or logging operations this year and no charges were laid. The area was patrolled as often as possible by Inspector and Guardian, Posters were put up and regulations discussed with fishermen and residents in course of patrols.

Guardians.

One guardian was employed in the Terrace-Lakelse area this year. This man, Mr. G.F. Ironside had to be retired from service before the end of the salmon season, due to his age. At the time of his retirement no suitable man could be found to take his place and the season was finished without a guardian.

Mr. Ironside has given very good service to the Department for several years.

LOGGING.

Logging operations were in full swing in the early part of the year but since the strike in the Spring have been greatly reduced in this area.

Larger operators are back at work but several of the small mills have closed, due to drop in prices.

Columbia Cellulose Ltd. have discontinued their river operations altogether and are shipping all their logs from this district by rail. This company has pushed a road about 16 miles up the Kitsungalum river on its West bank and are trucking logs to a spur at the mouth of the river.

LOGGING.

Logging has been heavy along this West bank of the Kitsumgalum river, and while no damage can be found at present to the actual river itself, there is no doubt that increased logging on this scale will have some future effect on spring run-offs and fall flash floods.

WATER RIGHTS.

One application for water rights was referred to this office in 1952. Rights were for water from Red Rose creek which is a small mountain stream and not a salmon producer.

SEALS.

The annual Skeena river harbour seal hunt was carried out this year by inspectors Gellley and Giraud. A total of 163 seals were killed, which is average for the last 5 years as a total of 813 have been destroyed in this time. Numbers appear to be declining slowly and the reason for the steady yearly kill can be accounted for by improved technique in hunting. Only 3 seal noses were turned in to this office for bounty. These were killed by local sportsmen and are only a very small percentage of the number destroyed by this means.

STREAM CLEARING.

No stream clearing was done in the area this year. Two jobs that were contemplated, on which engineering advice was required, had to be postponed due to pressure on the engineering staff, caused by the Babine Slide. Arrangements have been made so that this work will be done as soon as possible in 1953.

BABINE SLIDE.

Several trips were made to the Babine slide during the year. The first trip was made on snowshoes to observe conditions in the early Spring before high-water. Several other trips were made later in the season during the salmon runs.

REY STRAITS.

Redd sampling was carried out in the early Spring before fry came out of the gravel, water temperatures and levels were taken during this period.

This work was more or less discontinued during the Summer months as Fisheries Research Board have a staff at Lakelse lake on a year around basis who are doing this same type of work.

EQUIPMENT.

No new equipment was supplied to the area this year with the exception of a .303 rifle for protection and predator control. The panel truck, supplied in 1949 operated satisfactorily, but it should be replaced this coming season as repairs will be higher and more time lost to make these repairs in 1953. The motor on this truck has not been touched so far and there are indications that it will need a new motor soon. This truck has passed the 50,000 mile mark, which is equal to more than double the mileage in ordinary city driving.

GENERAL

There has been a general influx of men and equipment to the immediate Terrace area in preparation for work on the Terrace to Kitamat railroad. Slashing has started on this road and rockwork for the railroad bridge at Terrace is underway. Several new stores have opened up and two new banks have come in to Terrace take care of this increase.

A local Game Warden, with Headquarters in Terrace, has been appointed.

Lining was quite active in the district until the drop in base metal prices in the fall, when several small properties closed.

Terrace, B.C.  
January 2nd 1953.

*A. S. Giraud*  
A. S. Giraud,  
Fisheries Inspector.