

Smithers, B.C.
January 15th, 1954

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

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Herewith please find my annual report of the Fisheries in the Babine - Morice Area for the season 1953.

A. TREND OF THE SEVERAL FISHERIES

On Babine Lake the Indian Fishery for food purposes amounted to 27,019 salmon, this is somewhat lower than 1952 when 34,690 salmon and an additional 8,000 discarded salmon were taken, but higher than 1951 when it amounted to 19,204 with an additional 3,000 discarded as unfit for use and attributed to the effects of the Babine River Rock Slide. This season all were good sound fish and the catch is about on an average over the past ten years. As many Indians are working at logging or sawmill camps the fishery is therefore carried out by the very young and the old with the result that there is a smaller fishing effort. The large numbers of salmon this year made it easy for the Indians to get their food supply.

At Moricetown Canyon the sum of 3,825 salmon were taken by the Indian fishery. This was slightly higher than the 3,252 salmon for 1952, but much lower than the approximate average over the past ten years of 10,000 salmon. The Indian catch at Moricetown Canyon often signifies the escapement to the Nanika River. The small numbers taken are therefore pretty much in line with the estimated 35,000 sockeye that spawned there this season. Again this season, Indians were not very enthusiastic about fishing, possibly due to their economic conditions; many only came to the canyon after work to catch one or two fish to eat fresh.

In comparison to the Moricetown Indians the Bear Lake Indians, whom modern economy has not changed to any extent still rely on fish and game for a livelihood. They were very pleased with their food supply catch having taken approximately 500 sockeye and 800 spring. A check of Coho or Charr was not possible, they reported they had some but numbers were not known.

Sports fishing at Babine Lake showed a noticeable reduction in American fishermen but an increase in local fishermen, their total catches resulted in approximately the same as past years except the Steelhead fishing which showed better catches due to the heavy run.

Sports fishing, particularly for Steelhead, was excellent in the Morice River, Bulkley River and Kispiox River, with very good and consistent catches being made.

The Indian Food supply catch at Moricetown showed 978 Steelhead taken which is quite an increase over 1952 with 411; 1951 with 244, 1950 with 219, 1949 with 165, 1948 with 205 and 411 in 1947. The reason for this increase is not known, & local sports fishermen were all very pleased with their catches.

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B. CONDITION OF FLEET OF FISHING VESSELS.

As there is no commercial fishery in this area we have no conventional fishing craft. Most boats are of the flat bottomed or dug-out type. There were a few new boats added to replace those that had to be discarded, as the life of an Indian built boat is seldom over three years.

C. DEVELOPMENT OR CHANGES.

1. The Babine River Rock Slide.

The removal of the Babine River Rock Slide was completed by the General Construction Company about the middle of April. The results of this work were shown by the way salmon were able to pass that part of the River without difficulty.

2. The Fish Culture and Development Branch.

(a) Tagging Program.

Salmon tagging was carried on at Kisgegas Canyon and at the Babine River Rock Slide site by the Fish Culture and Development Branch. Tag recoveries and dead counts were made in all spawning areas of Babine Lake with men stationed at Fort Babine, Fulton River and on board the F.P.L. Branta.

(b) The Babine River Slide Road.

The Babine River Slide Road was kept open all season with some maintenance work.

(c) Moricetown Fishways.

Maintenance work was carried on this fall in cleaning, repairing and painting the fishways in preparation for next season.

3. The Fisheries Research Board.

(a) 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	714,614
Spring	8,353
Pink	1,018
Coho	7,648
Chum	17
Steelhead	298

Total	731,948
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They also checked all tags placed on Salmon by the Fish Culture and Development Branch that past through the counting fence, and aided in the dead count.

(b) They operated the fry and adult counting fence on Wiggins Creek (Six Mile Creek) making adult ~~xxx~~ counts at the fence and experimenting and checking the salmon spawning up the Creek.

C. DEVELOPMENT OR CHANGES cont.....

4. F.P.L. Branta.

Captain R.C. Mercer and crew worked on the F.P.L. Branta this spring, doing maintenance work on engine and hull, made new cupboards, installed a Kerosene refrigerator, installed gum wood strips at stern of boat, did general painting on boat and at Fishery stations and tested all equipment.

5. A 5 H.P. Johnson Outboard motor was received for use on the F.P.L. Branta.

6. Helicopter Survey.

Personel of the Department of Fisheries and the Fish Culture and Development Branch were able to make a survey by helicopter of the Babine River from Fort Babine to below the slide and over several inaccessible streams. Those who used the helicopter were very pleased with its work and were able to see things that days of work on the ground could not accomplish. They were able to get a good view of a place approximately $\frac{1}{2}$ mile above the slide which has been removed, of another slide area. The survey however was made a little too early to get a proper idea of the salmon.

D. ABUSEMENTS.

There were very few abusements this season, The Sil-Van mine have a problem of tailing disposal which has not been solved or eliminated to date but has been taken to a higher level of authority. Rumors predict that the mine will shut down shortly due to economic conditions.

E. CLOSE SEASONS.

Close seasons have been very well kept this season. At Moricetown Canyon as a compromise for the fishways and the few salmon the Indians were taking, they were allowed to fish continuously.

F. STEPS TAKEN FOR PREVENTION OF ILLEGAL FISHING.

A Patrolman was stationed at Fort Babine to prevent illegal fishing, count the Indian food supply catch, repair equipment and buildings, to make creek inspections, and this season to aid in making a dead counts and the collections of tags.

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

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

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.

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

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 the winter months, when the roads are better, on those sawmills which may be close to any salmon streams.

There was only one mine in this area (Sil-Van) which operated. They began milling in the spring but were not successful in retaining their tailings, water samples were taken and the problem put before the mine supervisors and the District Supervisor of Fisheries.

H. CONDITION OF FISHWAYS.

The Fishways at Moricetown Canyon did not have all the grates installed at the beginning of this season, however most of these were put on during the season. This fall annual maintenance work of cleaning, painting etc. was accomplished. The fishways seemed to function quite satisfactorily during the past season.

I. SPAWNING CONDITIONS.

SOCKEYE

The Bulkley River System including the Morice Lake area had a medium to light run of sockeye, approximately 35,000 spawning in the Nanika River. This is a little lighter than the brood years, however water levels were about normal this season with several spells of quite high water, and spawning conditions were therefore excellent.

In the Babine River and Lake area the largest counted and recorded number of sockeye past through the counting fence operated by the Fisheries Research Board. These Sockeye were in very good condition, their date of arrival was normal, stream water levels were high and spawning good. As the bulk of the run arrived at Babine after the Skeena River Closure, most sockeye went to the late streams and received a very heavy seeding with some wastage in eggs, but as these areas had a maximum seeding this fact is considered negligible. On the early streams the number of spawners were only average therefore some of these show only a medium seeding.

In the Bear Lake Area water levels were about normal becoming very high in October after heavy rains, Sockeye were estimated at 9,000 most of which were Lake spawners. There were very few sockeye in the creeks although water conditions were excellent. Lake spawning continued from the beginning of September until after our last trip on Oct. 17th.

SPRING

I. SPAWNING CONDITIONS Spring cont....

SPRING

The run of Spring to the Bear Lake area was about medium with approximately 10,000 large and medium fish spawning in good water conditions. The run to the Babine River of 8,353 spawned well with a medium seeding, all were of good size. Springs on the Upper Bulkley River showed a slight increase, and were able to use the entire river as water levels were excellent. On the Morice River an estimated 10,000 spawned. In general there was a medium run of good sized springs to the area.

PINKS.

A very light run of Pinks spawned in the Babine River, however all spawned out well. Pinks spawned this season in the Morice River and Bulkley River with an estimated 4,000 for the two streams. This is quite a good run considering that they were unable to spawn above the Moricetown Canyon until after the erection of the Fishways. The Bear River area was light to medium with an estimated 1,500 spawning. All were good sized with sexes about even and compares slightly less than the brood year.

COHO

In the Bear Lake area Coho had not started spawning at the time of our last visit. In the Babine Lake area the run was smaller than most years with 7,648 passing through the counting fence compared to 10,554 in 1952; 2,122 in 1951 and 11,654 in 1950. Conditions were good and they were still spawning at time of last inspection. In the Bulkley River system and Morice Lake area the Coho run was about average, some streams had more than average and other less. Spawning conditions were excellent and continued even after freeze up. With the high water levels this season Coho were able to enter spawning areas that they had not been able to get to for the past two years because of low water conditions. The Coho run in this area does not seem to vary very much in the past several years. In all areas those Coho examined were of large size with sexes about even.

CHUMS.

This was a record year when 17 Chums passed through the counting fence on the Babine River.

STEELHEAD

Sports fishermen are commenting on the numbers of Steelhead in the Bulkley and Morice Rivers. The average were not large in size but in excellent condition, many of these had net marks on them but about the middle of December the size of the Steelhead caught had become larger and there were no net marks apparent. This run, I believe, is the largest in this area in several years.

The Babine River had a medium run with 298 passing through the counting fence before its removal. It is the heaviest fall run seen and is comparable to the usual spring runs. As many steelhead are known to spawn below the fence the above figures are only indicative of the Babine River run.

I. SPAWNING CONDITIONS. Cont.....

DOLLY VARDON

This predator abunds in the Lakes and streams of this area. They become good sized and many sports fishermen prefer them to rainbow trout when taken in good condition.

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.

An excellent run of sockeye entered the Babine Lake area which was facilitated by the closure of Fishing on the Skeena River. Good water conditions gave the late streams a heavy seeding

Other Salmon runs were not spectacular and ranged from light to medium, Steelhead were heavy in comparison with past years.

Indian food supply catch was satisfactory in most cases and no complaints have been received to date.

Equipment on the whole worked well with the exception of the motors supplied for the Babine # 1. when much trouble was experienced.

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

W.K. Elliott
Fishery Officer.

Weather Conditions.

Although temperatures dropped sharply after the first of the year, water levels remained slightly above normal during January and February. The Spring break up was about two weeks earlier than normal with a steady run-off and no floods.

Water levels remained slightly above normal throughout the Summer, came up sharply towards the end of September and stayed high through to December.

There were three flash floods in the immediate Terrace area during the Fall but these did not reach much farther inland. The weather was very mild throughout December and there was no ice in local streams and lakes before the end of the year.

Spawning Ground Summary.

Water levels were adequate throughout the salmon spawning season. Stream surveys were hampered to some extent by continual high water, after the end of September.

Sockeye.

The Sockeye escapement of about 30,000 fish was slightly better than that of 1949. Fish were in general of a good size and few jacks were present. Lakelse lake had a slightly better seeding than in 1949, while Allistair lake was much heavier seeded. Kitsumgalum lake was about the same as in 1949, while the Kispiox river system was much lighter than 1949.

Springs.

The Spring escapement can be considered to be a little better than average, although no accurate figure can be given on this variety.

Indian catches were slightly above those of 1949 and the few streams on which a count can be made showed a slight increase.

Cohoe.

The Cohoe run of about 25,000 fish was lighter than in the years of 1951 or 1952 but heavier than 1950. Very high water levels made an accurate estimate on some streams impossible.

Pinks.

The Pink escapement, while not up to the cycle year of 1951, was well above the 1947 and 1949 years. The escapement of about 230,000 fish is taken from the streams on which an accurate estimate can be made and is not a true figure for the whole Terrace Lakelse area. The 1951 figure for these same streams was about 310,000 fish.

Chums.

The chum escapement of about 4,000 fish was only about half as good as that of 1950, but about the same as that of 1949.

Steelhead.

The Steelhead run can be considered to be well above average, both by the Indian catch, and catches made by Sportfishermen. An exceptionally good run of large fish entered the Kispiox river in September. Several fish weighed in by Sportfishermen were over 25 pounds, while the largest weighed 30½ pounds. Other Steelhead streams showed a better than average run.

Sportfishing.

Very good catches of Steelhead were made in Copper, Kitsumgalum and Kispiox rivers.

Cohoe catch was good in Kispiox river, but lighter than usual in Kitsumgalum river.

Good catches of Dollyvarden were taken from Copper river throughout the year.

Catches of Dollyvarden and Cutthroat were very good from Lakelse lake and river early in the season, but not up to normal in the Fall.

Indian Fishery.

The following is the catch from the Indian Fishery as compared to 1952.

	<u>1953</u>	<u>1952.</u>
Sockeye	9,200	9,085
Springs	1,125	995
Cohoe	1,530	885
Steelhead	720	508
Pinks	1,120	1,720
Chums	240	175
Total	<u>13,935</u>	<u>13,360</u>

During the first part of the sockeye season catches were very light compared to those of the same period in 1952, but increased sharply after the mid season closure of the commercial fishery. The increase in the coho catch over the 1952 figure comes from the Hazelton and Kispiox vicinities as natives returning from a poor season at the canneries hit this variety a little harder than usual.

An unusually large Spring salmon was taken in the Indian Fishery at Hagwilget Canyon by gaff. This fish weighed 102½ pounds.

Violations.

One charge was laid under Section 39 of the regulations resulting in a 20.00 dollar fine.

One short net of no commercial value was confiscated, but the operators could not be found.

Two instances of damage to streams were found but in both instances guilty parties co-operated at once to clear up the trouble at their expense and no legal action taken.

The area was patrolled as often as possible by Inspector and Guardian, posters were put up and regulations discussed with fishermen and residents.

Guardians.

One Guardian was employed in the Hazelton area of this district who supervised the Indian Fishery in that area as well as making routine river patrols and some spawning ground surveys.

This man, Mr. R.J. Allen fulfilled his duties satisfactorily, but can not be employed next year due to age limit.

Logging.

While Columbia Cellulose Co. and other large lumber manufacturers remained in operation throughout the year, a large number of small operations were closed due to falling prices.

Columbia Cellulose have pushed their road on the west bank of the Kitsumgalum river as far as the Nelson river at the head of Kitsumgalum lake. At present this company are taking all their logs out by truck. Surveys were started at the mouth of the Kitsumgalum river as to the feasibility of a small storage dam to allow a holding ground at the companys railroad spur and the driving of the Kitsumgalum river. To date no definite plan has been laid down for this project and as far as it is known it is only a possibility and not a probability.

Water Rights.

Five different applications for water rights were referred to this office for investigation.

In all instances the streams in question were small unimportant streams which do not support a salmon run.

Harbour Seals.

The annual Skeena river seal hunt was carried out again by Inspectors L.J. Gelley and V.H.B. Giraud. A total of 157 seals were killed during this hunt which continued throughout the month of June.

Five more seals were killed by local Inspector during the season. Three seal noses were turned in to the Terrace office for bounty.

Stream Clearing.

Stream clearing and improvement was carried out on three streams in the area by the local inspector.

Two large log jams were removed and an earth and log breakwater thrown up in three places for a total of about 900 feet. This work was done with a bulldozer at a total cost of \$ 829.00 for material and labour. This work was done on Williams creek.

On Schulbuchand creek logs and debris was cleared for about 200 feet and a gravel and log breakwater thrown up along this distance. One large beaver dam was removed from this stream. A total expense of 247.50 was incurred on this operation.

On Deep creek two beaver dams and one log jamb were removed at a cost of \$ 19.00 for powder and fuse.

In addition to this work Columbia Cellulose Co. removed a log jam that they had caused on Star creek, with their men and machinery, under supervision of the local inspector.

B.C. Public Works Department dug a channel around a slide on Deep cr. with their machinery and men. This slide was caused by Public Works while constructing roads.

Equipment.

A new International Half Ton Panel truck was supplied to the area this year. This machine is equipped with a front mounted power winch, which has proved more than satisfactory on the bad roads this Fall.

General.

Work continued throughout the year on the Terrace to Kitimat railroad. The main railroad bridge across the Skeena river at Terrace is under construction and should be completed early in the Spring of 1954. Slashing on the rightaway from Terrace to Kitimat has been completed and the rough grade finished from Terrace to Lakelse lake.

A trip was made over this rightaway to inspect streams and rivers which might be affected by construction. Several potential danger spots were noted, but Canadian National Railroad officials have given their assurance that they will be taken care of.

Mining was not very active with the drop in base metal prices.

A new limerock quarry was opened up at Shames river, with the intention of shipping the limestone to Columbia Cellulose co. at Port Edward.

A new Provincial Government Building was built in Terrace during the year.

Education.

Two Department of Fisheries Films, Salmon Story and Salmon Runs were shown throughout the district. A short talk on the importance of our salmon runs and general conversation was given by the local inspector after each showing. These films were very well received both by children and adults.

Terrace, B.C.
February 22nd, 1954


V.H.B. Giraud,
Fisheries Inspector.