

ANNUAL REPORT TERRACE - LAKESE AREA - 1956.

Weather Conditions.

It was very cold during January and February with very little snow. Spring run-off was late with no high water. Water levels were low throughout the summer due to hot dry weather and did not come up until the Cohoe run in the fall. There was one severe flood during the Cohoe run and water levels were above normal through most of this run. Water levels dropped to normal with colder weather in late November but came up again suddenly at Christmas time due to five days heavy rain and melting snow. Levels were down again by New Year.

Spawning Report.

Sockeye -

Spawning on Lakelse lake grounds, namely Williams and Schulbuchand Creeks, was very light this year. Kitsumgalum area had about an average seeding. Kitwanga Lake is all lake spawning and an accurate estimate of spawners is difficult. Indian catch and number of fish observed in the Lake would indicate the best run to the area in years. Both Kispiox and Allistair Lake systems were very well seeded. This run, taking the area altogether, was a little better than in 1952, and about equal to the heavy spawning of 1948.

Springs -

The Spring run can be considered about average. A good run was found on Kitsumgalum and Kitwanga Rivers while Kispiox River had an average seeding. Most of the smaller streams on which accurate estimates can be made showed an average seeding and in some cases an increase on the cycle year. Indian catch in the main Skeena system was good.

Cohoe -

The early Cohoe run to farther inland streams such as the Kispiox was about average. The later run to the Lakelse, Citnadoix and all streams in this vicinity showed a very good seeding. Taking the two runs together the area was very well seeded, much heavier than in 1952 or 1953.

Pinks -

The Pink run was light throughout the system as compared to 1954 and very light as compared to the big run of 1952. This run dropped sharply in 1954 from the 1952 seeding and dropped further this year to about half of the 1954 seeding. It would appear that the odd year Pinks, that in 1947 were lighter than the even year fish, have now surpassed the even year cycle. This is from indications from the 1953 and 1955 runs. Fish for the most part were very small in size.

Chums -

This area can not be considered as an important Chum producer as spawning is limited in most cases to a few scattered fish on some of the smaller streams. Kispiox and Kitwanga Rivers are the two biggest producers. The run this year can be considered as average but in no way equal to the heavy seeding of 1954 when there was an exceptional run on both the Kitwanga and Kispiox. This year was about equal to 1952.

Steelhead -

Catches in the Indian Fishery and the Sport Fishery indicate an average run. Catches have been better than 1955 but slightly lighter than 1953 or 1954. Fish were smaller in size than those taken in 1953 and 1954.

Sport Fishing.

Steelhead catches by sport fishermen were a little better than in 1955. Fair catches were made in Kitsungalum, Copper, Kitwanga and Kispiox Rivers. A few fish of up to 30 lbs. were taken in this Fishery.

Cohoe catch by sport fishermen was good throughout the area. Good catches of Cutthroat and Dolly Varden were taken throughout the district.

Indian Fishery.

The following is the Indian Catch as compared to 1955:

| | <u>1955</u> | <u>1956</u> |
|-----------|-------------|-------------|
| Sockeye | 5,275 | 10,750 |
| Springs | 1,310 | 2,000 |
| Cohoe | 2,330 | 3,100 |
| Steelhead | 1,010 | 1,350 |
| Pinks | 1,550 | 1,200 |
| Chums | 140 | 220 |
| | <hr/> | <hr/> |
| Totals | 11,615 | 18,620 |

One hundred and fifty-seven permits were issued this year as compared to 131 in 1955 and 99 in 1954. Closure of most of the sockeye season and the fact that fishing companies are dropping some of their Indian fishermen accounted for this rise in permits as less Indians went down for the commercial fishing this year. Sockeye catch was double the 1955 figure as fish were much more plentiful and the catch was taken on the whole with about the same fishing effort as 1955 although there was an increase of 26 fishermen. Water levels were more favourable to this fishery this year than in 1955.

Violations.

No violations of Fisheries Regulations were found and no charges laid.

One instance in which a logging company caused a log jam in a stream was cleared up at once by the company and no action was taken.

The area was patrolled as often as possible by Inspector and Guardian. Posters were put up and regulations discussed and explained to fishermen in course of patrols.

One charge was laid against a sport fisherman, for taking Chum salmon, by the local Game Warden and a \$10.00 fine was assessed by the local Magistrate.

Guardians.

One Guardian, Mr. R. Bennett, was employed in the Hazelton area to look after the Indian Fishery and make routine and spawning ground patrols. His services were satisfactory. He used his personal car for patrols to Kitsequecla, Glen Vowell and Kispiox.

General.

Work is continuing on the Terrace to Kitimat highway but it will be at least another year before this road is completed. About 20 miles of blacktop were laid in the Terrace vicinity this year.

Mining has been slack with only one small base metal mine and a small lime quarry in operation.

A total of about 2,250,000 Pink eggs were taken from Lakelse River this year. About 1,000,000 were taken by Mr. P. Wickett for Jones Creek experiments and another 1,250,000 taken by Mr. B. Johnson of Washington State Fisheries Department. About 1,400 female and 700 male Pinks were taken to supply these eggs.

Northwest Power Industries Ltd. have been operating out of Terrace all season, making surveys on the Naas River. They have been serviced by Pacific Western Airlines aircraft and helicopters.

V. H. B. Giraud
Fisheries Inspector.

Terrace, B. C.
February 25, 1957.

1956

Smithers, B.C.
Jan. 7th. 1957.

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

Herewith please find my annual report of
the Fisheries in the Babine - Morice Area of District
2, B.C. for the season 1956.

A. TREND OF THE SEVERAL FISHERIES.

The following is a table of the Indian
Food Supply Catch at Moricetown Canyon for the period
1946 to 1956.

| Year | Sock. | Spr. | Steel. | Coho | Pink | Total. |
|------|-------|-------|--------|-------|------|--------|
| 1946 | 8,673 | 759 | 518 | 3,255 | 5 | 13,208 |
| 1947 | 3,279 | 1,145 | 438 | 2,501 | 537 | 7,898 |
| 1948 | 9,829 | 1,122 | 208 | 1,892 | 1 | 13,050 |
| 1949 | 7,590 | 1,500 | 169 | 2,284 | | 11,543 |
| 1950 | 5,735 | 1,437 | 225 | 1,654 | | 9,051 |
| 1951 | 2,805 | 780 | 244 | 419 | 19 | 4,267 |
| 1952 | 1,097 | 1,186 | 411 | 487 | 61 | 3,252 |
| 1953 | 727 | 1,271 | 925 | 747 | 151 | 3,822 |
| 1954 | 445 | 1,885 | 231 | 5,851 | | 8,412 |
| 1955 | 575 | 1,320 | 226 | 1,941 | 259 | 4,321 |
| 1956 | 1,429 | 3,200 | 298 | 1,617 | | 6,532 |

The general trend of the Fishery is
taken from the Indian Food Supply catch as we do not
have a commercial fishery. From the above table we can
see the general trend, the totals over the past 11 years
show quite a difference, however the total for 1956
being 6,532 is only slightly less than the average.
It will be noted that the way these totals are made up
varies greatly. The numbers of Sockeye escaping generally
governs these figures. A poor escapement of Sockeye
will mean that other species have to be taken to make
up the amount of food required, other factors governing
these figures are weather, and economic conditions.

Water levels were again low this season
necessitating the continued use of the fishways at
Moricetown Canyon. This factor will again influence the
trend of the Fisheries.

In the Bear Lake area the Indian Food
supply catch amounted to 900 Sockeye and 800 Springs.
This is an average catch, 25 Indians spending the fishing
season at Bear Lake. As Coho, steelhead, and Charr are
generally taken after our inspections, their numbers are
not known.

New Access roads have been built into several
good sport fishing areas. A new Lodge being built this season
at Bear Lake to accomodate sport fishermen and hunters.
Flying to these more inaccessible Lakes is steadily
increasing, and these catches are unknown, however it is
believed they have had good success this year. Steelhead
fishery was excellent and good catches were being made up
until Christmas.

Continued on page 2.

B. CONDITION OF FLEET OF FISHING VESSELS.

As there is no commercial fishing in this area we have no commercial fishing vessels. Most of the boats used in the Indian Fishery are of the flat bottom or river type peculiar to this district, and dug out canoes. A few of the older boats have been discarded being replaced by new boats generally with outboard motors.

C. DEVELOPMENT OR CHANGES.

1. Fish Culture & Development Branch.

a. Biologist Stokes made a stream survey of the Manika River with reference to the ALCAN plans for utilizing this river for power development.

b. Maintenance and repair work was carried out on the Moricetown Fishways. This work was prevented last year due to adverse conditions and was therefore urgently required this year.

2. Skeena River Investigation.

a. A tagging program was again carried out this season with the usual tag recoveries.

b. Adult salmon samples were transported to facilitate their early delivery with reference to our search for some means of identifying salmon that frequent our waters.

c. A fry counting program was carried out this spring on the Kispiox River primarily to estimate the down stream migration of Pink Salmon, however all species were counted. The results of this first year of operation were very gratifying and with more experience and better equipment we should have better success next spring.

3. B.C. Forest Service.

a. This year the Babine River Slide Access Road was turned over to the B.C. Forest Service as an access road. Late this fall they had equipment working on the road but were unable to complete their program before freeze up.

b. This season the B.C. Forest Service diverted Owen Creek at its outlet into Morice River to facilitate a better road into the McBride Lake area. It was questionable about salmon using this new entrance into Owen Creek, however when the time came they entered without any difficulties.

c. The cut of timber continues in the area with high production. It is now being taken from the more inaccessible area and truck hauling of up to 40 miles is not uncommon.

Continued on page 3.

C. DEVELOPMENT OR CHANGES cont.

4. Beaver continue to increase in this area, their dams now constituting a hindrance to ascending salmon. Some means of rectifying this is now under discussion.

5. Employees of ALCAN made salmon spawning surveys on the Hanika River, Upper Morice River (near outlet of Morice Lake a cable and cable car are used to count salmon migrations); A lookout was placed on the Morice River at a point just above Owen Creek Canyon.

6. The Smithers Rod and Gun Club received approx. 90,000 trout eggs last spring, these were hatched with an approx. 2% loss. 40,000 young trout were released in Chapman Lake, and the balance released in Bill Nye Lake; Tyee (McLure) Lake; Governement Lake; Irrigation Lake and Seymour Lake.

7. The B.C. Department of Highways have an extensive road building program in this area and are using metal culverts at Creek crossings. These appear to be quite satisfactory when installed properly to the passage of salmon.

8. Our Guardian at Moricetown did considerable work to the Moricetown Cabin, repairing eaves troughing, fences, walks etc. also he assisted at Donald's Ldg. in the erection of a wharf.

9. Equipment as a whole operated satisfactorily, Mercury truck # 52-14 suffered a rear end breakdown which curtailed activities somewhat.

D. ABUSEMENTS.

This season, as in 1955, owing to a small run of salmon, Indians were quite anxious to keep all the salmon they could catch for their own use. In seasons of good runs there is a tendency for them to try to sell salmon. Therefore this season there were few salmon sold and the practise has been kept to a minimum.

Sawmills are generally quite good regarding pollution and no cases have been found in this past year which would warrant any action being taken.

E. CLOSE SEASONS.

With the small run of salmon, no close seasons were kept this season. This was done so that the Indians would have a chance to take sufficient salmon to last them through the winter.

Continued on page 4.

F. STEPS TAKEN FOR PREVENTION OF ILLEGAL FISHING.

1. A Guardian was stationed at Moricetown Canyon with the following duties.

- a. Prevention of illegal fishing and sale of salmon by the Indians.
- b. To regulate fishing and count the Indian Food supply catch.
- c. To inspect several spawning grounds.
- d. To repair and keep buildings and equipment in order.

2. One Inspector carried out patrols by foot, boat, car and aircraft.

G. PROTECTION OF WATERS FREQUENTED BY FISH.

A check of sawmills and mines, if in operation is constantly being made regarding the pollution of waters. Most of the sawmills are checked during the winter months when roads are more passable. The Cronin Babine Mine was in operation for a period this summer and fall, the Sil-Van Mine is doing exploratory work and should this prove worth while they plan to operate the mill in 1957.

H. CONDITION OF FISHWAYS.

Maintenance work was not done last year, therefore there was considerable work to be done this fall. Several of the gratings had been badly bent and had to be straightened, new beams were placed down the venters of the fishways to help support these gratings, some cement work was necessary and all the gratings were painted.

I. SPAWNING CONDITIONS.

SOCKEYE.

Sockeye arrived in the area slightly later than usual but at about the same time as last year, July 6/56. The sockeye Indian Food supply amounted to 1,429 indicating a low escapement. The Nanika River bore this out with an estimated 5,000 to 7,000 spawners. Sizes were mostly large with sexes about even, there were a few jacks. Low water prevailed during the ascent and spawning periods.

At Bear Lake an estimated 10,000 sockeye spawned mostly in the lake, streams were mostly poor, Azaklotz Creek had about 500 salmon. A large beaver dam near the outlet of this creek may have forced some of the creek spawners to spawn in the Lake. The Indian food supply catch amounted to 900 Sockeye, salmon were mostly large with very few jacks, sexes about even. Water levels were low but sufficient for good spawning.

I. SPAWNING CONDITIONS cont.

SPRING.

This was an average year for springs in the Bear River with an estimated 15,000 to 20,000 spawning. This is much better than the cycle year when 2,000 to 5,000 spawned. Salmon were mostly medium size, about 30% large and approximately 10% Jacks. There should be a medium seeding with water levels slightly on the low side.

An average run of approximately 10,000 springs spawned in the Morice River, this was some better than the cycle year. There was a light run on the Upper Bulkley River which were slightly hindered by low water and beaver dams, however salmon reached the top reaches. On all streams there were approximately 10% Jacks, a high percent for these waters, other fish were mostly of good size and spawned well. There should be a medium seeding over the whole area.

PINKS.

In the Bear River no pinks were observed this year. The reason is not known.

On the Bulkley system no Pinks were observed above the Moricetown Canyon. In general this was a very poor year for Pink salmon.

COHO.

There was a medium run of medium and large size Coho to the area with about 6% being Jacks. Coho encountered considerable difficulty on some streams in surmounting Beaver dams, in some cases Coho were unable to reach their normal spawning areas. Low water levels helped to contribute to holding them back. Heavy frosts in early November froze at the beaver dams and completely stopped Coho from getting over.

On the Bear River some Coho were observed in deep holes but had not begun spawning at time of last inspection. Altogether I feel that the whole area received a medium seeding.

STEELHEAD.

Sports fishermen had a good season which will compare with the past good years. The Morice and Bulkley Rivers are reported as having a good run of Steelhead.

As it was not possible to go into the Johanson Lake area we did not make an inspection. However from reports of fishermen, they had excellent success.

I. SPAWNING CONDITIONS cont.

CHUMS.

Very few Chum salmon ever enter this area and none were observed this season.

DOLLY VARDON.

This predator abounds in the lakes and streams of this area, they become good sized and many sports fishermen prefer them to trout when taken in good condition.

J. GUARDIAN SERVICE.

The Guardian Service is comprised of one only guardian stationed at Moricetown Canyon.

K. SUMMARY.

In summary Sockeye escapement was poor, Spring escapement was medium, Steelhead were average, Coho escapement was medium, No Pinks were observed above Moricetown Canyon and no Pinks at Bear Lake. Indian Food supply catch was only slightly less than average, water levels were low throughout the season. Men performed their duties and equipment functioned satisfactorily.



W.K. Elliott
Fishery Officer.