

AT FREDERICTON, N. B.

From Levite Theriault
of River du Loup, P. Q.
and Edmundston, N.B

Sept. 1, 1893.

SAW MILLS ON NEW BRUNSWICK SIDE OF ST. JOHN RIVER.

Connors. At the head of the railroad. 1 steam mill on the St. John River, 3 or 4 shingle machines. Started sawing about 2 months ago. Probably lets rubbish go into river.

Winding Ledge. There was a small mill at this place, which was destroyed. Now putting up another, a rotary. Mr. Verret proprietor.

Little River. P. S. Pelletier's mill. Small water shingle mill, about 2 miles up Little River. 1 shingle machine. Dam across stream; no fishway. Rubbish probably goes into stream.

Baker's Lake. Mr. Jueret, proprietor, 1 mill, 1 steam shingle machine. Has been working only about 2 or 3 weeks. Probably puts refuse in river.

Caron Brook. Has no mill now.

Baker Brook has nothing (unless Mr. Theriault has it mixed with Baker Lake. He said they were same).

Gagnon has a grist mill and carding mill, but no saw mill or tannery.

Edmunston, Murchies, a large water mill, with 1 rotary and 12 shingle machines. This is located $1/2$ mile up the Madawaska above the St. John. Dam across the river; no fishway. Burn part of refuse now, but may let some go in river. Used to let all go in river.

Silver Stream, 6 miles above Edmundston, on Madawaska River, Steam mill, 1 rotary. Not now in operation, and thinks it will not be worked again.

Temiscouata Lake, P. Q. Cabino stream, emptying into west side of lake, a located a short distance above Tetu. Bartram's mill--water--1 rotary, 2 or 3 shingle machines. Dam across stream; no fishway. This is in the upper waters of the Madawaska River.

Rockway River, David Rousso, about 14 miles

up the river. Water mill, 1 rotary, shingle machine, grist mill. Dam across river, no fishway. This may be same as the Iroquois River on Loggie's map.

Upper St. Basil. Nothing but a small grist mill.

Green River, 1 water mill, about 2 miles up the river from the St. John, 1 up and down saw. Do very little business. Dam across river. No fishway. This is the best trout river in New Brunswick.

Siegas River, Regius proprietor, 1 water mill, 1 or 2 shingle machines, 1 rotary. Dam across river; no fishway. Lets refuse go into river.

Grand River. 1 grist mill, and there may be 1 up and down saw, but no shingle machines. About 3 miles up river. Dam across river, no fishway. Water mill.

Thiboreau Brook. 2 miles up stream. Grist mill and 1 up and down saw; but no shingle machines. Dam across river; no fishway. Water mill.

Grand Falls. On Little River, just above the falls. 1 mill, grist, 1 rotary, and some shingle machines. Water mill. Dam across river. No fishway.

One grist mill on the west side of the St. John River, at the falls. Parent proprietor.

Little River, 4 miles above the mouth. P. O. Byrum. Mill destroyed last year; now putting up a new one. Water mill. Rotary and probably shingle machines. Dam across river.

Salmon River. Steven's mill. Water mill. 5 or 6 shingle machines. Dam across river; no fishway. Makes a large pile of refuse, which goes into river.

There are no log driving dams on the rivers in the region covered above.

MAIN SIDE OF THE ST. JOHN RIVER.

St. Francis Plantation, J. A. Wheelock's mill, just a little below Connor's steam mill. 3 or 4 shingle machines. This may be in St. John Plantation.

St. John Plantation, D. Sinclair, on Sinclair Stream, 1 steam mill, 3 or 4 shingle machines.

Fort Kent. 2 miles up Fish River. Bradbury, water mill. At least 2 or 3 shingle machines and perhaps a rotary. Dam across river. Thinks there is no fishway.

Van Buren, Van Buren Manfg. Co. Steam mill on shore of St. John River. Large business; several shingle machines. Large quantity of refuse thrown into river.

GENERAL NOTES FROM MR. THERIAULT.

Upper waters of the St. John excellent fishing streams. This refers to the parts above St. Francis, lying wholly in Maine. They have plenty of water, and the water clear. Much resorted to.

St. Francis River, good stream for trout and togue. Nothing to prevent the fish going up. No dams or natural obstructions.

Green River, splendid river, and contains especially large trout. Clear water, and rocky channel. Has several large lakes in its upper waters.

Thinks a fishway could readily be constructed over Grand Falls, and considers that it should be done. Would be a great advantage to both New Brunswick and Maine. There is plenty of water above the falls for salmon, and thinks they would run up and find good spawning grounds above, especially if the young were planted above. Grand Falls are the only obstructions in the St. John River. The little falls at Edmun^dston are too insignificant to interfere with the passage of any fish.

Does not know of the accumulation in the bed of the St. John River of any mill refuse above Fredericton, that is, to any appreciable extent,

so as to threaten navigation or the fisheries.

There are such accumulations in some of the side rivers as at Woodstock.

Mr. Theriault has planted landlocked salmon in Baker's Lake and Temiscouata Lake. The eggs came from the hatchery at Grand Lake Stream, and were hatched by him and at his expense. Planted 75,000 fry. Adult fish are now taken in both of these lakes, and they have also been reported from Allagash River and lake in Maine. He thinks the only way they could have gotten into these waters was from his plantings. He desires to obtain more eggs, which he will hatch and plant at his expense in waters contiguous to Maine and New Brunswick in this region. Requested me to propose the same to Commissioner McDonald.

JOHN A CAMPBELL.

Fredericton, Sept. 1, 1893.

Mr. Campbell is a prominent farmer living on the St. John River, just above Fredericton.

Nets are set in the St. John River, up to the limit of tide, which is about 6 miles above Fredericton. There are about 20 bar nets set for salmon within this distance. Some poaching is done ~~by~~ with drift nets. The Indians also spear salmon to some extent, but not much. The nets are set to catch fish going up stream, not down stream.

The salmon season extends from March 15 to Aug. 15(see law). Do not begin to fish much, however, for salmon until June 1 to 15, generally.

Begin to fish for shad about May 15.

The shad stay only about 2 or 3 weeks. Catch alewives about the same time as shad, or slightly earlier. The shad do not strike in until after the ~~ale~~^ewives have appeared. The method of fishing for shad and alewives is with drift gill nets. These fish are taken while going up, not while descending.

These facts relate to the vicinity of Fredericton, and the river from there up to tide

limits, which have been observed directly by Mr. Campbell.

Gizzard fish is caught beginning about Oct. 1, although some few are taken in the spring. Those taken in the fall are full of roe, nearly ripe (Is this the Dorosoma cepedianum? Jordan gives distribution as south from Cape Cod. Can get only a vague description of it in Fredericton, but it seems to correspond with Dorosoma). .

Sturgeon. The months for taking sturgeon are June and July, but they are very scarce now. Some American fishermen came in and cleaned them out. They were found originally from Grand Falls way down the river. Now they are much more limited in range. They used to attain a length of 8 feet and a weight of 300 lbs., but the larger ones were not common. During the past 6 years has not seen any weighing over 50 lbs. Have always been caught in this vicinity only incidentally. They have used set nets for them farther down the river, but about Fredericton they were mostly taken in nets set for other purposes. They would sometimes become entangled in the nets, but the mesh was too small to mesh them. In illustration of their abundance

and size, told us of making a trip out in a sail boat with a fisherman about 20 years ago, when he was actually frightened by their appearance.

The fisherman, who was... (faded text) ... J. H. Fisher's fisherman like Mr. Beckwith, an older man (faded text) ... and the Mayor, Mr. Beckwith, a member of (faded text) ...

GENERAL CHARACTERISTICS OF SOME OF THE RIVERS, AS VIEWED FROM THE SOUTH, NORTHWARD.

Saginaw River, tributary of Grand Lake, Cassin's Co. Was caught salmon with a fly in this river, and considered that it should be actually a good salmon stream. Salmon were very abundant in this river a number of years ago. He was fishing there 4 years ago and caught 1 salmon per day. He says that he has seen a hatchery and that he has seen a hatchery above Cassin's River. Mr. Fisher, the Mayor, has been there and has seen the river mill. There are no hatcheries in this river. The dam has no hatchery. He thinks the hatchery has been built in this river, and

FREDERICTON, SEPT. 1, 1893.

Conference with Charles W. Beckwith, City Clerk (a great sporting fisherman, who has travelled much in this province) J. H. Phair (a fisherman like Mr. Beckwith, an older man of much experience), and the Mayor, Mr. Beckwith, a brother of the above.

GENERAL CHARACTERISTICS OF SOME OF THE RIVERS, ARRANGED FROM THE SOUTH, NORTHWARD.

Salmon River, tributary of Grand Lake, Queen's Co. Has caught salmon with a fly in this river, and considers that it should be naturally a good salmon stream. Salmon were very abundant in this river a number of years ago. He was fishing there 4 years ago and caught 1 salmon and 3 grilse, which was considered a good catch. He was there 4 or 5 days; did his fishing above Gaspereaux River. Dr. Gardner, of Boston, has been there a great deal and knows the river well. Cause of decrease has been laid to a mill dam near Chipman. The mill here is small. The dam has no fishway. He thinks no salmon fry have been planted in this river. Shad

run up at least to the head of Grand Lake. Gasper-eaux run up Salmon River as far as they can go.

There are no landlocked salmon in these waters.

THOROUGHFARE BETWEEN GRAND LAKE AND MAQUAPIT LAKE.

There used to be an abundance of striped bass in this thoroughfare, now they are very seldom seen here. Pickerel are abundant and are caught through the ice. Eels and white perch are abundant in the spring. The former are taken in pots. Catfish are also caught. The above fish are regularly taken here for the market.

Little River empties into French Lake, and thence into Maquapit Lake. He has been told that it used to be a good salmon stream. It is now a good trout stream. Has heard that some salmon have been taken there lately, but would not vouch for the statement. There used to be a mill and dam near its mouth, less than 1 mile from French Lake, but both are gone now.

Oromocto River. There used to be 2 large mills on the Oromocto River, but not much milling is now done on that river, and thinks there is no trouble there now with respect to sawdust.

S. W. Branch Oromocto has always had a clear way to the fall. Said to have been a good salmon stream, but has no salmon now.

N. W. Branch Oromocto, for 20 miles up from the fork, has quiet, stagnant water, full of pickerel and eels. Thinks it never could have been, and would not become a good salmon stream. The upper waters, however, are good, and have plenty of trout, very few, if any, pickerel get up there.

Porto Bello Stream, flowing into French Lake, east side, never has been a salmon stream. Trout were uniformly abundant, but it has been invaded by pickerel, and trout have become scarce.

Nashwack River. This was a great salmon river, and still would be, way up to its source, if it were opened up. Shad and alewives also went up in abundance. None of these fish can get up now. During recent years a few salmon have been seen below the dam at Marysville. The river below this place is now pretty well filled in with sawdust, which is at least 10 feet deep in some places. Sawdust also occurs in the St. John River below the mouth of the Nashwack, as far as the Oromocto Shoal. The stuff dredged at the latter place consisted $\frac{1}{3}$ of sawdust.

The dam on the Nashwack at Marysville has no fishway. There is a dam across the river at Stanley with no fishway. The mill here belongs to Sansom. It is a saw mill and shingle mill. Ordinary sawing is done only on a small scale for local trade. The shingle business is a large one. All of the refuse goes into the river. Alex. Gibson has about completed a new dam about 7 miles above Stanley. It is a driving dam with no fishway. There is another driving dam at the narrows, just above Lower Nashwack Lake. It has no fishway. There are still other driving dams above this, one ⁱbeing located below St. Marys Lake.

Nashwacksis River. Nice little trout stream. Never could have been much of a salmon stream, although it is said some salmon have been taken upon it. There are no mills upon it to interfere with fish.

Keswick River. Salmon used to run up this river. New mills were built on this river 4 or 5 years ago at Stone Ridge. They make boards, shingles, last blocks, etc. It is a steam mill. Sawdust and cedar rubbish are allowed to go into the

river. This stuff is simply piled on the bank along the edge of stream.

Nacawicæ River. Never heard of salmon going up this river, but used to be a good trout stream. At Pinder's mill the rubbish is thrown on the bank, where it gets into river.

Pokiok River has a fall at its mouth, impassible for salmon.

Shogomoc River. Nothing but a trout stream.

Eel River is dead water, and thinks it is not good for a salmon stream.

Maduxakeag River. Used to be a good salmon river, and salmon are now occasionally taken below the dam. There are no saw mills on it in New Brunckwick above Woodstock. There is, however, a dam, without a fishway, some 8 or 10 miles up; thinks it is in New Brunckwick territory. Salmon have been taken, both with fly and bait, in the St. John River, this season, at the mouth of the Maduxakeag River.

Little and Big Preakue Isle Rivers. Has

heard that salmon used to go up these rivers.

Becaquimec River, the same. There is nothing else, however, of importance in Carleton Co. on the east side of the river.

Tobique River. This is the principal salmon river flowing into the St. John, and it has greatly improved during the past 5 years. It is under lease to the local government and the New Brunswick Land & Lumber Co. (New Brunswick Railway Co.).

Aroostook River. They have been catching some salmon with a fly at the falls. These falls are at Fort Fairfield, Me., about 6 miles up from mouth of river. All the mills on this river are above the falls. (See top of next page).

Salmon River, Victoria Co. Never was much of a salmon river, and is not such a stream as salmon would be expected to frequent. They go to the base of Grand Falls, and being turned back will play off the mouth of Salmon River.

Aroostook River. Indians say that some salmon have been taken above the falls, but not

many. It is a fine trout stream, and should be good for salmon.

St. John River, above Grand Falls, is not wide, but relatively deep and rapid water. There are no obstructions in the main river. Trout are the principal sporting fish in the main river and its tributaries.

Grand River. A trout river, but not so good for trout ^{as} as some of the others. Thinks it has some dams without fishways. It is a great route for crossing to the Restigouche River.

Quisebis River is a very fine and good-sized stream.

Green River is the best trout stream in the upper St. John. It contains especially fine and large trout. Thinks it has no obstructions, but there may be one.

Madawaska River is a fine trout stream, Murchie has a mill and dam a short distance up from the St. John. This is in Edmunston.

Baker and Caron Brooks are good for trout, but the St. Francis is much better. There are no

Obstructions on the St. Francis.

Fish River, Me. is reported to be a very good trout stream.

SOMETHING ABOUT A FEW MILLS, FROM THE SAME PERSONS.

Stone Ridge, on Keswick River, just above New Zealand settlement. These are American mills, regarding which we have notes elsewhere. Thinks these are the only mills of consequence on the Keswick, but there may be driving dams farther up.

Millville, Nacawicac River, There were 2 mills here, but one was burnt down, leaving only one at present. Water mill, with dam. Small mill, cuts shingles and some other lumber, and ships some by railroad.

Temperance Vale, Nacawicac River. Pinder's mill, water mill, with dam across river. Cuts lumber of all sorts, including shingles.

Pokiok, River same name, south side of St. John River, York Co. The Pokiok River has a high fall right at its mouth, over which salmon could

not ascend. It is a good trout stream above the falls. Large mill at the falls, owned by Edward Berry. Cuts everything, including shingles. It is a water mill with a dam.

Lower Canterbury Shogomoc P. O. Water

mill at the mouth of the Shogomoc River. Thinks it is owned by a Mr. Esty. Dam across the river. Cuts chiefly boards and clapboards.

MISCELLANEOUS, FROM SAME PERSONS.

The cusk is a good food fish, and by some is much esteemed. They are caught in the fall through the ice. They have large roe and livers at that time. Knows positively that they range through the St. John from Oromocto to 100 miles above Grand Falls, and may have a more extended range. They are abundant in some places.

The gizzard fish(Coregonus) will not take the fly, but will take bait in the spring through the ice. They are quite abundant in the St. John River, but he does not know of their being taken below Oromocto.

White fish will not take bait, so far as his experience goes in the upper waters of the St. John system.

Pickereel are not native to the waters of the St. John system. A few were brought in barrels, by an American, from the east Schoodic Lakes to Eel River Lake, in the extreme western part of York County, 27 years ago. They have spread from this lake through Eel River into the St. John system, where they are now abundant.

There is much salmon poaching on the St.

John River about Fredericton. Capt. Pratt has been up to investigate, and can report fully on this subject.

The gas works at Fredericton have made a visible effect upon the river within the past 10 years. Previously they disposed of their refuse without letting it go into the river. These works are located some distance back from the river, and their drain comes out at Shore street, a short distance below the railroad bridge across the St. John. They used to get good spring fishing on the Fredericton side of the river, but they do not now. The cause has been laid to the refuse from the gas works.

We visited the river at this point. The gas works is quite small. The drain outlet is small and well up on the bank, some distance from the water. A small stream of clear water only was flowing from it, but they told us that when, from time to time, they cleaned out the apparatus in the works, the coal tar refuse came down in large quantities. There was considerable tar refuse, solidified on the bank below the drain outlet. I do not think that this pollution could have more than local influence. It would not probably be sufficient

to effect the general movement of fishes up stream.
There was no appearance of pollution in the stream
about here.

INVESTIGATION

Sept 1, 1952

Report of the investigation of the

water quality in the stream at

the above location.

The water was found to be

of good quality and free from

any pollution.

Conclusion

The water in the stream is

of good quality and free from

any pollution.

The water is suitable for

drinking and other uses.

It is recommended that

the water be kept clean and

free from pollution.

The water is of good quality

and suitable for drinking.

FACTORIES IN FREDERICTON, N. B.
FROM PERSONAL OBSERVATIONS.

Sept. 1 and 2, 1893.

Beginning at upper end of town.

The water works are in the upper end of the town. See notes elsewhere.

At the upper end of Queen street (street parallel to the water) there are three factories-- door and sash factory, patent leather factory, and saw mill.

Door and sash factory. Belongs to a man named Risteen. This is some distance back from water, and no wood refuse could possibly get there unless wheeled across the street and some distance beyond.

Patent leather factory, J. W. Simmonds, prop.; this is a small establishment (relative to the tanneries we have seen) which tans hides, which are made into patent leather, for carriages, harness

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Patent leather factory, J. W. Simmonds, prop.; this is a small establishment (relative to the tanneries we have seen) which tans hides, which are made into patent leather, for carriages, harness

shoes, etc. A good quality of goods is made here. Nothing is allowed to go into the river, and the City Board of Health sees that the regulations are carried out as regards fleshings, etc. The building stands some distance back from the water, and such liquids as he drains out, are drained into a hollow in the land along side the factory, where they must thoroughly filter before reaching the river. The amount in any case would be small. It is a steam factory.

He has 2 small leaches and 12 vats for tanning purposes. The water from the soaking tanks and lime baths drains into the land. The fleshings are buried and sold to farmers. Every possible care seems to be taken to prevent any polluting matters getting into the river.

R. A. Estey's steam saw mill is just below the patent leather factory, between the street and the river. It contains 1 rotary, 2 shingle machines, and 1 planer. The sawdust and other refuse is burned in the mill for making steam. A good deal of sawdust is sold about town, but none is put in the water. Such edgings as are not re-

quired for making steam are sold in the town for firewood. Cedar bark is used for filling for wharf, and when built out a regular wharf front is to be built along face of pile. At present it looks as if the front of this pile of bark refuse would be washed away with the first flood.

There is nothing to be considered along the main front of the town. Notes are given elsewhere on the gas works, in lower part of town.

There are two large steam mills on the St John River bank below Fredericton. They are about $1\frac{1}{2}$ and 2 miles down the river from the city of Fredericton, on the same side.

Phoenix Mill is the upper one. Owned by John G. Murchie, of Calais, and operated as an American mill. Makes shingles exclusively. Has 16 shingle machines. Is the largest shingle machine in New Brunswick, and larger than any in Maine. There was a mill here first in 1848. It has been rebuilt several times. During the last 33 years at least no refuse has been put into the river from this mill. Has 2 furnaces, one under boiler, and one waste furnace. Burn the surplus refuse in the

latter and such waste as cannot be burnt in the former. Use chain belts to carry the refuse. Everything falls into this belt (all kinds) and all are carried together on to the top of the furnace. Before they built the waste furnace, they had a burning dump outside. They have built wharves out of their refuse, but this was mainly finished several years ago. Some of the black refuse (bark) is still used to fill in about wharves, but none placed where it would work into river.

The yearly output of shingles is from 40,000,000 to 50,000,000.

Everything about this mill looked very clean, and there was nothing objectionable seen along the river front.

Have trouble with cedar shingle refuse, which comes down with their logs. It costs them \$11 a day to burn refuse, \$3. chargeable to the refuse from their own mill, and \$8 to the drift from other sources.

Victoria Mill. This is the lower mill, owned by Hale & Murchie; contains 1 gang, 1 rotary,

1 clapboard sawer,
 1 edger, 2 butters and trimmers, 2 clapboard planers,
 1 lath and picket machine. Their output is about
 as follows:

12,000,000 to 14,000,000 ft. long lumber a year.		
3,500 clapboards daily, for 6 mos.		
40,000 laths	"	"
2,000 pickets	"	"

Have boiler furnace, waste furnace and outside burning dump. Burn large proportion of sawdust, but much is carted out and dumped to build up a high wharf at this place, which they intend to face when carried up and out sufficiently. There is an immense bank of sawdust at this place, the most of which is old, having been there some years. The new sawdust they are throwing on outer edge reaches down very nearly to the water. They assured us that the freshet in the spring would not come up on to it, but it certainly must a great way, from the statements given us by others. It seems as though some facing should be put in front of the pile, before the sawdust is put in. However, the Harbor Master, Mr. Estey, assured us that no harm was ever caused by sawdust washing away from this place.

Some of the edgings are burnt on outer dump, and some are sold as firewood. There is a

tramway running to the dump, which is some distance off. The sawdust is carried to the furnaces by chain belts.

There was an old mill on this site, but the present one has been recently built. This is the 1st season for the gang, and the 2nd for the rotary.

This is an American mill, (though Mr. Murchie of Calais, Mr. Hale lives here) and obtains most of its logs from the Aroostook.

We later had a conversation with Mr. Hale, who said that the cedar drift caused him much trouble and expense. Thinks that it costs the Fredericton Boom Co. at least \$10,000 extra a year to dispose of this drift which enters their booms. Comes mainly from the Aroostook.

The channel has ben filling up in front of the Victoria Mill. The water in front of pool in front of mill oncehad a depth of 15 feet. Now it is quite shoal.