

ROBERT ORR.

FISHERY OVERSEER FOR THE COUNTY OF YORK,

Fredericton, Sept. 2, 1893.

Capt. M. A. Akerley was also present, and assisted in the explanations. He is 63 years old and has been on the river since boyhood. Was a river captain for a long time, but has not been actively boating for the past 20 years.

Oak Point, St. John River(25); There is now no mill at this place.

Oromocto, St. John River, (62). Very small mill about 2 miles below Oromocto. Charles J. Chase steam mill. 1 rotary, 1 shingle machine. Stands a little back from the river, with a long log chute leading up. It is a very small affair; cuts long lumber and shingles(we saw the sawdust piled up some distance back from the water, but in the spring the water might reach it).

Upper Gagetown, St. John River(47), Small steam mill belonging to Capt. Crothers. Stands a little way back from the water, but not far. Not likely to throw anything into the water.

Blissville, Oromocto River(65). There is a dam with fishway at this place.

Tracey Station, Oromocto River(67). There is a dam with fishway at this place.

Gibson, St. John River, opposite Fredericton(73). There has been a tannery at this place, but the buildings have not been used for a long time, and are in bad condition.

One saw mill, belonging to E. S. Babbitt, steam mill with 1 rotary and 1 shingle machine. It is near the margin of the St. John River. He piles his sawdust on the shore, above the level of the water at present, but in time of freshet it would be covered and carried away. He has promised Mr. Orr that it shall be removed before high water comes. It will be carted away to use for banking around houses, etc. Probably does not make much sawdust during the season.

Manzer's Brook, tributary of the Nashwack. Little water mill, with rotary belonging to a man named Coy. It is about $1/2$ mile from the Nashwack. There is a dam across, with no fishway. This brook is only a very little stream, and the mill is of no

importance. He lets everything go into river, however. Saws for local trade only.

Nashwack River, about 10 miles above Marysville, there is a small steam mill belonging to a man named Hanson. It has one rotary and saws for local trade. Most of his rubbish goes into river.

Douglas(74). On the Nashwacksis not as much as $1/2$ mile above the St. John River, there is a small tannery where "upper" leather is tanned. The tannery is 50 rods back from the Nashwacksis, and he thinks there is no chance of any rubbish getting into the water.

Nashwacksis(75). This is a short distance up the river of the same name. There is a small water mill at this place, containing only 1 up and down saw. Saws very little lumber. Puts all refuse into the river. There is a dam across the river, with no fishway. There is bold water at the mouth of this river, and it is 50 feet wide at the bridge.

Royal Road(76), on the Nashwacksis, about 4 miles up from its mouth. Water mill belonging to

a man named Esty. It is a very small mill; dam across the river; no fishway. Contains 1 up and down saw. Allows all rubbish to go into river.

Zealand, on the Keswick River. Steam saw mill, with 1 rotary and 1 shingle machine. Does quite a business for local trade. Such of the rubbish as is not used for fuel, is wheeled out of the mill and dumped where it readily finds its way into the river.

Keswick(87), on the Keswick River. No saw mill at this place.

Jones Forks, of the Keswick River, about 1 mile above this river, there is a ^{water} ~~saw~~ mill, with 1 up and down saw. There is a dam across the stream, with no fishway.

Prince William(77). A little saw mill, belonging to D. C. Joslin, located on a little brook, about 50 rods up from the St. John River. Water mill, with 1 up and down saw. Very little work is done here, and the conditions are not important.

New Zealand(89). Steam mill, belonging to A. Brewer, situated on a little brook emptying into the Keswick River. Only a little sawing is

done here for local trade, and none of the refuse could reach the Keswick.

Manners Suttin(91), Oromocto River. The woolen mill formerly existing at this place has been burnt down.

Harvey(92), Oromocto River. Does not remember ever to have seen any mills there.

Benton(108), Eel River. This is on the line between York and Carleton Counties. Halfpenny's County Atlas places it in York County. There is a tannery and saw mill here, but Mr. Orr remembers nothing special about them. There is a small lake or mill pond just above the two factories. There is a dam here across the river, with no fishway. The Eel River was formerly a great river for salmon

Pokiok(81), York Co., on Pokiok River, about 100 rods from the St. John River, there is a high fall, with one steep incline of about 25 feet, over which salmon could not go. The river is good above this, however. There is a water mill at this place belonging to Hill & Berry. Their dam is just above the falls, and they let all of their rubbish go into the river. It is a large mill, containing gangs, shingle machines, planers, etc., doing a

large business, and much complaint is made about their refuse going into river.

Dumfries(79), on the St. John River.

There is a hemlock bark extract factory at this place. It is located about 20 rods back from the river. Steam factory; burn their bark; has seen nothing going into river.

Temperance Vale(83), Nacawicac River.

Pinder's mill, about 8 miles up from St. John River, water mill with dam across and no fishway. All rubbish is allowed to go in river. Contains 1 rotary, 1 shingle machine, and clapboard machine. Does quite a large business.

Millville(90), Nacawicac River. Hay's water mill; contains 2 shingle machines. Dam across the river, with no fishway. All rubbish goes into the river. The Nacawicac used to be a good salmon river. There is another mill at Millville, using the same dam as the above. When the water is low, however, they employ steam. Their refuse also goes into river. The Nacawicac River is about 25 feet across at this dam.

Stanley(85), Nashwack River, John Sanson

has a water mill at this place, containing rotary, shingle machine, planer, etc. It is a good-sized mill. There is a dam across the river. It used to have a fishway, but it was burnt and has not been replaced. All refuse goes into the river.

Gibson's driving dam. Alex. Gibson has built a driving dam across the Nashwack River, about 6 miles above Stanley. It has no fishway.

Cross Creek. This flows into the Nashwack just below Stanley. On the creek, in the village of the same name, there is a water mill called Robin's Mill. It has 2 shingle machines. There is a dam across the creek, with no fishway. All refuse goes into the creek.

Tay Settlement(86), on Tay Creek, which empties into the Nashwack some distance below Stanley, there is a water mill belonging to T. McNutt. There is a dam across the stream, with no fishway. All refuse goes into the stream. This mill contains 1 shingle machine, and is a small affair.

Upper Southampton(82). G. Brown has a small water mill on a little stream flowing into the St. John River. It is located about $1/2$ mile from the mouth of the former. It contains 1 rotary.

There is a dam across the stream, with no fishway.

Southampton. Fox & Ingraham have a small water mill on the St. John, which probably obtains its water from a small side stream. Contains 1 up and down saw. Does very little business.

Most of the above noted mills are small, and saw only for local trade. They run for a variable period during each year, dependent upon the water, demand, etc.

The size and importance of each mill may be judged from the number of saws, and other notes given.

There are log driving dams in nearly all the streams in this region, especially in their upper waters.

Capt. Akerley explained about the changes in the channel of the St. John River, which he said were chiefly due to ice jams in the spring. Immense jams would form, lying on the bottom, and when the force of the backed up water became too great it carried everything before it. At such times the ice tore up the bottom, and, by mere force, would carry sand and gravel some distance. The bed has changed a great deal (relatively), but the shoals

R. A. ESTY, FREDERICTON, N. B.

Harbor master and owner of a saw mill in the upper part of Fredericton. Sept. 2, 1893.

Questioned him especially about the condition of the harbor now as compared with formerly and the causes of changes.

He said the actual head of tide was about 8 or 9 miles up the St. John above Fredericton, at a place called the Ferry, or Crock's Point (This will be found on the Timber land map). At Fredericton when the wind is favorable they may have a rise of 1 foot, as has happened within a week, but ordinarily there is only about 4 inches of tide. This is during the drier season of the year. In high water, when the current is strong from above they have no tide here. Brackish water is ordinarily perceptible only about 25 or 30 miles above St. John, but this matter varies with the quantity of water in the river.

The harbor laws of Fredericton apply to the river in front of the town from Garden's Creek above to the county line below. It has been questioned and never settled as to whether he has juris-

diction way across the river. However, vessels anchoring within 500 feet of the other shore have refused to pay harbor dues, and no action has been taken to compel them to.

Most of the wharves are owned by the city, which is allowing them to fall to pieces, without taking any pains to keep them in repair, although the expense would be light. The materials composing the wharves, the filling, etc. is constantly falling into the water along the edge, and is more or less moved by the currents, ice, etc. This is the cause of much filling in along the edge of the river, and he regards this as being the most serious question affecting the harbor today.

Barring this matter there is now as much water in the river at Fredericton as when he was a boy. Some dredging has been done at times.

Does not know that there are any deposits of sawdust in the main river unless it may be close on the other side below the mouth of the Nashwack. Does not, however, think there are any banks of sawdust at all, even on that side. The shoals and bars which occur consist of sand and fine gravel, with only an occasional showing of sawdust. The

sawdust which may accumulate in any place would be swept down by the spring freshets, which are very heavy.

There never was more than 2 feet depth of water in the channel of the Nashwack at its mouth, the same as occurs there today. About the bar at the inner end of the island at the mouth some sawdust has accumulated.

There has been a saw mill on the site of the present Hale & Murchie mill below Fredericton for over 50 years. The sawdust was all put in at that place up to 20 years ago, but there is no indication anywhere below it of this sawdust.

Gibson's gang mills at Marysville are also very old.

He considers that sawdust has not interfered with ~~sawdust~~ navigation at Fredericton in any way.

The cedar drift gives much trouble at the mills and booms. The cedar bark does not float, but in places where it is put in the rivers it is very persistent, being more fibrous than other barks. Has had no trouble with the ordinary cedar drift at his mill. It costs the Fredericton Boom

Co. a large amount of money every year to get rid of it.

The principal shingle mills are on the Aro^ostock, and in the St. John River above Grand Falls.

The river from Fredericton up is navigable only during seasons of high water. This is due to natural conditions being unfavorable, and not to any artificial obstructions. There are no deposits of sawdust through that part of the river. There are no dams on the main river.

Above Fredericton, as a rule, the refuse from the mills is thrown into the river, seldom being cared for in any way. Mr. Esty thinks that the putting of this refuse into the river and side streams should certainly be stopped, but regulations regarding the same should be uniform on both sides of the line, both as a matter of justice, and in order to secure any good results.

Enormous quantities of the cedar drift become stranded in the spring on the low level lands, or intervals below Fredericton for a distance of 25 to 30 miles. This is a rich hay country, and an important farming country in that regard.

The drift settles all over it, and causes much annoyance, as well as involves much expense to the farmers, who are obliged to pick all the wood up and clear it from their land every spring. During the spring freshets the intervals^e are mostly covered with water, for a short time, and it is then that the greatest amount of drift is brought down. This freshet occasions in great part the richness of the land. Where the farmer is fishing at one time, however, soon becomes dry land by the subsidence of the water, and he begins his farming work. The drift becomes stranded and lies there until he picks it up.

Fully half of the lumber which passes through Fredericton comes from Maine, and is intended for the American mills in St. John.

The Fredericton water works is located at the upper end of the town, at the end of the long business street, which runs parallel with the river. The water is filtered through broken stone. It is considered a good water.

OBSTRUCTIONS,--PERSONAL OBSERVATIONS--

FREDERICTON, SEPT. 2, 1893.

This day we took a small boat, entered the mouth of the Nashwack, and went down a short distance along the opposite side of the St. John.

In the Nashwack, above the lower covered bridge there is a great deal of sawdust, forming bars along the side, and extending well out into the river. In some places it was 4 or 5 feet deep. Around the piers of the bridge and the boom just below the bridge it is deep and much occurs at the upper end of the little island at the mouth of the river. We were much hampered in the St. John proper by the fact that a stiff breeze was blowing, and the surface rough. We found traces of sawdust in many places at the mouth of the Nashwack, but no wheres deep, lying in or mixed with sand and fine gravel. Below the mouth we saw nothing in our hasty examination, but found deep water quite close along that shore. It would not be safe to come to

any conclusions without a more detailed examination there is an immense accumulation of sawdust in the Nashwack. Much of it is undoubtedly carried out in the spring freshets, where does it go to? There is no question but that the channel of the Nashwack is seriously impeded by the sawdust, as we saw that, but it is not in our province.

MR. THOMAS G. LOGGIE, OF THE CROWN LAND OFFICE,
FREDERICTON, N. B., SEPT. 1, 1893.

No hydrographic survey has been made of the St. John River. The British Admiralty has charts made from surveys by Admiral Owen many years ago.

In Pokioh, at the mouth of the Pokioh River, Mr. E. A. Very has a water mill, from which all the refuse goes into the river. It has filled up the mouth of the Pokioh and formed a great bank of sawdust there.

Pinder's mill, in Temperance Vale, on the Nacawicae, is a very bad place. It is a water mill. Another small water mill is at Millville.

There is a mill at Stone Ridge, but none at Upper Kiswick. The former is Brewer's, a small water mill.

There is a small mill at Cardijan on the Keswick River.

EDWARD JACK, TIMBER EXPERT AT FREDERICTON, SEPT. 1,
1893.

Cusk occur in Lake Utopia, also in the St. John River, about Fredericton. They are taken through the ice when it first makes, in November and December. By many it is considered a great delicacy.

Togue occur in Long Lake of Lepreal. They are caught on a bar with set lines. Thinks they are fairly abundant.

The gizzard fish is caught about Fredericton, in St. John, during the winter generally (seldom eaten, not regarded as a good fish).

There are no tom cod at Fredericton.

Bears are very fond of catching suckers in pools, and other shallow places.

Philip Cox, teacher in the Grammar School, St. John, has collected and studied New Brunswick fishes.

Landlocked salmon are not natives in Tamiscouata Lake, but have been introduced there and have increased considerably.

Togue occur in the St. Francis Lakes.

Tobique River is the main home of the salmon in the St. John system, and have been protected there by the American fishermen. Before their coming this stream was unprotected. It has no obstructions, and there is not a house above the forks. The accompanying sketch on white paper shows these upper waters. The Serpentine is the best stream preferred by the salmon.

Nashwack River was once a good salmon river. Have seen salmon taken off the Marysville dam in recent years.

Salmon have changed in shape within perhaps 12 years, due, it is thought, to the fact that the present stock has resulted from transplanting from other waters.

There was no fly fishing on the St. John until within 10 years.

Shad were plenty this spring in the basin at Grand Falls and are increasing in numbers.

The sturgeon used to go up to head of tide. The Indians used to take them about 6 miles above here, at the Indian summer headquarters, call-

"Aughpahac". Doesn't know that they go up there now. Told of one jumping into boat below Fredericton.

The following relates to mills:

Douglas(74) a small tannery, Kinghorns.

Deer Lake(94) Murchie has a mill here, which was burnt down this spring. May have rebuilt.

Victoria(102) Boyer's tannery.

Benton(108) One mill belongs to Murchie, the other to Sawyer, of Calais. Both have gang saws.

Debec Junction(109), small mill.

Richmond Corner(110) " "

Waterville(112) " "

Carleton Co., on the west side of the St. John River, doesn't amount to much for lumbering, but is good farming land.

FREDERICTON BOOM COMPANY.

Had a talk with A. H. F. Randolph, the Acting Treasurer, Sept. 2, 1892. His father, K. F. Randolph, is the President and Treasurer of the Company, but was not in Fredericton at this time.

Their booms are ~~not~~ on the St. Johns River. The upper one is at Sugar Island, 7 or 8 miles above Fredericton. Their lower one is about 9 miles below Fredericton, the Mitchell Boom. There are 4 other booms between, making 6 in all.

They have great annoyance and are put to much expense on account of the cedar drift, the triangular shaped shingle butts (or centers left after shingles are cut) giving them the most trouble. There is no way of estimating the extra expense to which they are put on this account, but it is very great. They first bring up at the upper boom with the logs. Being freed at this point, they drift down into the second boom, and thence down into the lower ones in succession. They have

to be freed from each one in turn, which makes them handle the drift six separate times before it escapes below their limits.

This trouble has not been of long standing, but during the past few years it has increased rapidly. He thinks this is due to the fact that many more mills have been built, especially up stream, nearer to the lumber tracts. The mills have gone to the lumber, in place of taking the lumber down stream to the mills.

Mr. Alexander Gibson used to load his wood boats(not scows) with lumber in the Nashwack River at the bridge across near its mouth. Owing to filling in with sawdust or other materials he was obliged to move his loading grounds to the actual mouth of the Nashwack. Recently, however, all the loading has been done in the main river below the Nashwack, on the east side, where we now see this work going on. It is between $\frac{1}{8}$ and $\frac{1}{4}$ mile below the mouth of the Nashwack.