

EASTPORT, MAINE. NOVEMBER, 1893.

Date.

Name of Witness.

Residence.

Business.

Length of experience in connection with the herring fishery.

HERRING.

How long has the herring fishery been carried on in Passamaquoddy Bay?

When were weirs first introduced and where?

Give a history of the increase in number of weirs, telling the places where they have been added and abandoned from time to time.

How have these different weirs fished from time to time?

What has been the cause of these changes?

What other modes of fishing have been employed, where, to what extent, and during what seasons? Give a history of the same.

Give an account of the abundance of herring in the bay from time to time, within your experience.

Had there been a decrease in the abundance of herring previous to the building of sardine factories?

What was the extent of the decrease and how do you account for it?

Has there been a decrease since the sardine business began; the causes and the extent of the same?

What are the sizes of herring occurring in the bay, past and present?

What sizes were marketed before the sardine business began, and for what purposes were they used?

How many of each size were used for each purpose?

In what places were they taken chiefly?

What sizes have been used since the sardine business began, and what quantity of each size for each purpose?

What are the sizes of herring used for each grade of sardines?

Are large herring cut down for sardines? What sizes are used and what proportion is taken off? What is done with the remainder?

What becomes of the herring taken from all the weirs in this vicinity including Grand Manan

What quantity of herring of each size goes to waste each year?

When did the business of making oil and pumice from herring begin, and what has been the history of this business?

Where was it carried on?

From what weirs were the supplies obtained?

What was the general process of manufacture?

What proportion of all the fish captured was used for this purpose?

Did it seem as though the amount of fish taken for this purpose was greater than should be allowed?

Where are the spawning grounds of the herring in this and adjacent regions?

At what seasons do the herring spawn?

What is the size of the smallest spawners?

What is the general condition of the fish when ripe with spawn?

For what purpose are the spawners used?

What methods of fishing are carried on on the spawning grounds during the spawning season?

What quantities of spawning herring are taken each year?

What proportion do they form of the large herring taken for market?

What would be the effect of a close season on the spawning grounds during the spawning period?

How long are the fish on the spawning grounds?

Where are the same fish before and after the spawning season?

What is the rate of growth of the herring?

From what direction do the herring approach Grand Manan and the mainland in this vicinity?

How many runs of herring are there?

What are the sizes of the herring in each run?

How long does each run continue, giving dates  
of beginning and end?

Where are the herring at other times?

Do the herring come in schools or scattering?

Do they swim at the surface or below?

At what depths are they taken by the gill nets?

How far off shore are they captured?

What is the direction of their movements along  
the coast?

In what weirs are they taken first?

Do they enter Friars Road from the east or  
west? (through Lubec narrows?).

Do they ever or always move south through  
Lubec Narrows?

After the fish have been taken in certain weirs  
, can you predict that they will soon  
reach other weirs? Give examples, and

state time of passage from one spot to another?

Is the driving of herring a harmful mode of capture?

In what way and to what extent?

Do you think there has been a general or permanent decrease in the abundance of herring?

What has been the extent of decrease?

What has been the cause of decrease?

Can you suggest any regulations that should be enacted to protect the herring?

MACKEREL.

What has been the abundance of mackerel in the Bay of Fundy, during times past, so far as you can remember?

In what places and by what means were they captured?

To what extent has purse seining for mackerel been carried on in the bay?

By what other means have they been captured?

How far up the bay do mackerel go?

Are the mackerel in the bay in schools or scattering?

Define the limits of the Bay of Fundy.

When do the mackerel arrive in the bay?

Until what time do they stay?

Do they spawn here, when and where?

Where do they come from?

How many bodies come into the bay?

What are their habits in the bay?

What sizes of mackerel occur in the bay?

Are scattering mackerel ever seen during the  
winter months?

What do the mackerel feed upon in the bay?

Have the mackerel decreased permanently in  
the bay?

If so, what do you think has been the cause?

Are mackerel ever taken with the herring,  
where, how, what season, and of what  
sizes?

LOBSTERS.

Has there been any decrease in the abundance of lobsters or in their average size?

Can you define the extent of this decrease?

What has been the cause?

How can the matter be remedied?

Where are the lobsters taken now?

What is the number of traps now in use compared with former times?

What is the average catch per trap) stating size of lobsters) now, compared with former times?

What quantity of lobsters is canned during the 9 inch season?

What quantity of lobsters is taken during the remainder of the year, and what disposition is made of them?

What is the average size of the lobsters now, and how does it compare with former years?

POLLOCK.

What is the abundance of pollock now compared with former times, explaining also any differences in size?

When are the young pollock in season, and when the large ones?

Where was the fishery carried on in former times, and where is it now?

On which side of the line have they been taken chiefly?

Do they require any protection and what?

MISCELLANEOUS.

Are there any other kinds of fishes in Passa-  
maquoddy Bay which require protection?

What are they?

State the circumstances.

## HERRING.

### Apparatus:-

What are the different methods employed for catching herring?

When were the weirs first introduced, and in what place?

What has been the increase in the number of weirs from year to year, or from decade to decade? That is, what has been the number of weirs in use from time to time since they were introduced?

What has been the distribution of the weirs from time to time; what changes have been made in their distribution?

Divide the region into districts, and work up the subject by districts.

What is the present number and distribution of the weirs?

Give a history of the changes in size and construction of the weirs from the beginning?

What are the sizes, shapes, and construction of the weirs at present?

What is the position of the weirs with

respect to the adjacent shore, and the body of water in which they stand; how near is the leader to the shore; what is the depth of water at the outer end and at the openings?

How many and which weirs are provided with doors on the outer side of the trap for releasing the fish? What are the sizes, depth, and construction of these doors?

How many and which weirs are provided with doors for closing the inlet openings to the weirs? What are the construction and mode of working of these doors?

How many men are employed directly in connection with the weirs, separately for Canada and the United States?

How much of their time is taken up in this occupation, and when not so engaged, how are they employed?

During how many and what months are the weirs in use?

What is the first cost of a weir, and the subsequent annual cost of repairs?

How often does a weir have to be entirely renewed?

What is the value of the weirs and other outfit used in same connection?

SEINES.

How many seines are employed for catching herring and in what places are they used?

What is their character and size, length, depth, size of mesh, &c.?

What is the manner of using them, and at what time of day are they used?

How many men are engaged in using seines?

How much of their time would be given to this fishery?

What quantities and sizes of fish are taken in the seines? This may be brought out by comparison with the weirs.

Are the seines used legally?

Give history of the use of seines.

What is the value of the present outfit?

GILL NETS.

In what places are gill nets used for catching herring?

What is the character and size, length, depth, mesh, etc., of the gill nets employed?

What is total number and total length of gill nets?

How are they employed, and at what time of day?

During what months are they employed, and for how long a time during the year?

How many men are employed in handling gill nets?

How much of their time is so occupied?

What sizes of herring are taken in the gill nets?

What disposition is made of the fish taken in this manner?

What is the quantity of fish taken annually in gill nets?

Give a history of the use of gill nets.

Are the gill nets used legally?

What is the value of the outfit of gill nets?

Describe fully the operation of driving herring?

Where is it carried on?

Is it carried on legally?

What are the quantity and sizes of fish taken by this method?

How many men are employed, and how much of their time is given to it?

Describe any other methods of taking herring.

USES.

What are the uses to which herring are put?

(sold fresh, smoked, salted, frozen, bait, sardines, pumice).

What quantity of herring is marketed fresh annually, including those sold locally?

Where are they sold?

Where are they taken?

What sizes are put to this use?

What is the season?

What is the history of the fresh trade?

Does this trade give regular employment to any men, and how many?

What is the quantity of herring smoked annually in this region?

What is the number of smoke houses and their location?

What are the different sizes of herring used for this purpose, and the quantity of each?

Where are they taken?

At what seasons are they taken for smoking?

What is the history of the smoked herring business?

How many men are employed in this business on

- each side, and for how much of their time?
- How are the smoked herring graded, and on what characters are the different grades based? Where are the herring obtained for this purpose?
- What quantity of herring is salted annually in this region?
- What sizes are used for this purpose, and what quantity of each?
- How many establishments are engaged in this business and where are they located?
- In what places are the herring taken?
- At what seasons is the salting done?
- How many men are employed in this business on each side and for how much of their time?
- How are salt herring graded, and on what characters are the different grades based?
- Where are the herring obtained for salting?
- Give a history of the salt herring trade.
- What quantity of herring is frozen annually in this region?
- What sizes are used for this purpose, and what quantity of each?
- In what places are they taken?
- During what months, and by what means are the herring taken?

In what manner and at what places is the business carried on?

How many men are employed and for how long a time?

Give a history of the frozen herring trade. Are there any establishments for freezing herring artificially?

What quantity of herring is used annually for bait in this region?

What sizes are used for this purpose and what quantities of each?

Where are they taken?

How are they prepared?

During what months are they taken for this purpose, and during what months are they used?

How are they taken?

How is the business carried on and in what places?

How many men are employed in this business, and for how much time?

Give a history of the use of herring for bait.

What other fishes are taken in this region extensively, to use as bait?

What quantity of herring is used annually for making oil and pumice?

What sizes of herring are used for this purpose and how many of each?

Where are herring taken specially for this purpose?

Are herring or parts of herring used, which have not been specially taken for this purpose? Describe what they are, where obtained, quantity, etc.?

During what seasons are herring taken for this purpose?

How is the business carried on and in what places?

How many men are employed in the business at what seasons and for how long a time?

Give a history of this business.

Are any other fishes utilized for this same purpose?

What is the quantity of oil and pumice produced?

What is the process of manufacture?

What disposition is made of these products?

What quantity of herring is used annually for sardines?

What sizes are used for this purpose and how many of each?

Where are they taken, i. e. what quantities are taken in each of the different places?

During what months are the different sizes taken?

Give the number and location of the canneries; the number of fish put up at each; number of men employed at each; capital invested, annual value of output, etc.

What sizes of fish are used for each brand of sardines, and how many of each?

History of the sardine industry.

DISTRICTS FOR DISCUSSION OF WEIR FISHING.

West of W. Quoddy Head.

Quoddy Roads and Lubec Narrows.

Johnson Bay.

Cobscook Bay (Includes South Bay).

East River.

Pennamaquan River.

Denny's River (and Morrison's Cove).

Campobello, Western or inner side.

" Eastern or outer side.

Western Passage, American side Eastport  
to Pleasant Point.

" " Deer Island side, includ-  
ing Indian Island.

Passamaquoddy Bay, American side, north  
of Pleasant Point.

St. Croix River, North side St. Andrews  
to Magaguadavic.

" " North side of Deer Island.

East side of Deer Island to and including  
both sides of Letite Passage.

New Brunswick mainland and adjacent islands  
east of Letite Passage, namely:-

Back Bay.

Letite Harbor.

Bliss Harbor.

L'Etang Harbor and River.

Black Bay.

Deadman Bay.

Beaver Harbor.

Wolves.

Grand Manan.

Give the number and positions of the weirs in each of the above districts.

Same with respect to seines.

Same with respect to gill nets.

Same with respect to driving.

Detailed charts showing the positions or areas covered by each of the above methods of fishing.

History of these fishing methods in each district.

The catch in each district by each fishing method during the present and all past years; the fluctuations in the catch, from year to year.

Give the sizes of herring taken by each method during the same period, and the relative quantity of each.

Does any one method of capture seem to be more destructive than the others?

Which method takes the most small fish?

What have been the principal marked decreases in the abundance of herring, when have they occurred, what was their extent, and to what were they ascribed?

Has the increase of weirs in Canadian waters had an effect in reducing the catch in American waters, to what extent, and how was this produced?

In which weirs are the herring first taken in the fall (and in spring).

What is their progression following that.

Where do any spawning grounds exist.

What becomes of all the herring taken in N. B. between Eastport and L'Etang? Do they dispose of any in that region, how many, and in what manner? What proportion are sent to Eastport and Lubec?

What sizes of herring are taken in the weirs? How many and what sizes are taken together? What proportion of each.

What is number of fishermen along border? What kind of fishing do they engage in, amount of time spent and other occupation?

How many and what size of fish escape through mesh of weirs?

Herring will stem the incoming tide and go out through the opening. Some have gates to shut off.

Only few weirs have gate.