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Results of an informal survey of Canadian Atlantic mackerel commercial, bait and recreational fishers (2018)

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Foreword

This series documents the scientific basis for the evaluation of aquatic resources and ecosystems in Canada. As such, it addresses the issues of the day in the time frames required and the documents it contains are not intended as definitive statements on the subjects addressed but rather as progress reports on ongoing investigations.

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ABSTRACT

Canadian catches of Atlantic mackerel (*Scomber scombrus*) are not all recorded, especially in the bait and recreational fishery. In recent years, efforts have been made to evaluate the amplitude of catch underestimation, include this in the scientific advice and adapt management accordingly. Specifically, in 2016 the mackerel stock assessment explicitly acknowledged catch bias for the first time. Important to the evaluation of unreported catch was the information gained from an informal online survey, targeting all Canadian Atlantic mackerel fishers in order to obtain a rough estimate of the proportion of catch which is undeclared (bait, discards and recreational catches). Because of the value of this survey and its simplicity to conduct, we repeated the process to inform the 2019 mackerel assessment on missing catch. Two hundred eighty fishers provided specific catch information, spanning all sectors and provinces. Overall patterns and conclusions were similar to results from 2016 in terms of bait and gear type, discarding (~2%), and recreational fishing (semi-professionally done by some). Purchase slip reception varied greatly by province, ranging from 100% (Newfoundland) to 29% (New Brunswick). In comparison to 2016, purchase slip reception differed only in Quebec and New Brunswick, at least in part because relatively more commercial fishers filled in the survey. Of the 4069 t caught by all survey participants, about half was caught by commercial fishers from Newfoundland (full reporting) and for 543 t no purchase slips were obtained. Missing catch remains a significant issue, especially in New Brunswick, Nova Scotia and Prince Edward Island.

INTRODUCTION

Mackerel from the Northwest Atlantic (*Scomber scombrus*) is assumed to be composed out of a northern and southern contingent. The northern contingent, on which Canada focusses, completes seasonal transboundary migrations between North Carolina (USA) and Eastern Canada, as far north as southern Labrador. Stock biomass is currently considered to be deep within the Critical Zone (DFO 2017, Doniol-Valcroze et al. 2019) and landings have been low since 2010 and limited by the TAC for the first time in 2016 and 2018. One of the key concerns related to the proper assessment and management of the stock is the important fraction of removals that are missing from the official catch statistics.

Missing catches are a longstanding issue for Atlantic mackerel (DFO 1997), but given the current depressed stock state, both science and management have recently increased their effort to address this issue. On the management side, reporting rates might have improved because of new measures implemented in 2018 (in 4T there is approximately 18% dockside monitoring as well as a 100% hail-in). Science on the other hand accumulated information on the magnitude of missing catches per DFO region and directly incorporated catch bias caused by the bait and recreational fishery in the assessment model (DFO 2017, Doniol Valcroze et al. 2019, Van Beveren et al. 2017b). As a result, catch recommendations in the last science advice report included both reported and missing Canadian removals. Accordingly, management also considered both catch fraction and the TAC in 2017 and 2018 was set at 10,000 t while missing Canadian catch was explicitly presumed to be 6,000 t. The latter is inherently difficult to determine but essential for improved management advice. New and updated information on missing Canadian catch could therefore help upcoming science advice.

During the last stock evaluation, one of the key elements to help assess missing Canadian Catch was an informal online survey, sent and filled out after the 2016 fishing season ended (Van Beveren et al. 2017a). This online survey was a very cost-effective method to gather a large amount of data in a short time span with little effort and practically no costs, which is particularly relevant for a fishery with a vast spatial scale, numerous participants and a great heterogeneity (gear types, fishing purpose, management measures, etc.). Despite that the informal approach has many pitfalls (e.g. not being standardized for specific groups, non-response bias, etc.), it was effective in providing a better idea of the scale and characteristics of missing Canadian catches.

Two years later, we relaunched the informal online survey aimed at Canadian Atlantic mackerel commercial, recreational and bait fishers. As in 2016, our main objective was to obtain a rough estimate of the proportion of catch that is used for bait, caught recreationally or discarded, and hence the catch reporting rate.

METHODS

The “[Google forms](#)” platform was used to create an online survey of 12-13 questions (depending on the first answer) directed towards all Canadian Atlantic mackerel fishers, but in particular to commercial and bait fishers (Appendix 1). Note that there are only minor differences with the 2016 survey. Nevertheless, unlike in 2016 we did not ask for the proportion of small fish observed by harvesters, as in contrast to last time there were no signs of a new recruitment peak and answers were not as informative as hoped. We replaced this question with one asking for the participant’s previous (2016) participation to this study, as to facilitate a comparison between the years. Participation was anonymous, no question was obligatory and most questions were open-ended so that fishers were free to provide additional information.

The survey was sent on 2018-10-22, or about two weeks after the TAC (Total Allowable Catch, 10,000 t) was reached and the fishery was closed (2018-10-09); the survey was kept online as long as answers were being submitted (i.e. until 2019-02-06). The survey was first spread by some regional managers before being sent twice by email in French and English to 3,359 e-mail addresses (excluding failed deliveries and repealed addresses) of licensed fishers of Quebec (QC), New Brunswick (NB), Nova Scotia (NS) and Prince Edward Island (PEI). Newfoundland (NL) could not be included in the mailing lists as DFO's Newfoundland Region could not provide email contact information of their fishing industry, as was also the case for the previous survey. Additionally, links were posted on Facebook groups (using a copy of the English form) and a recreational fishing forum from Nova Scotia. Regional managers actively helped to spread the survey. Throughout this document, commercial and bait fishers are together referred to as licensed fishers (in contrast to recreational fishers).

RESULTS AND DISCUSSION

SURVEY POWER

A relatively large fraction of submitted surveys was from fishers who did not actively participate in the fishery in 2018, or who did not specify their catch so that their relative contribution cannot be verified (0 catch to large catch). Although 419 non-empty forms were submitted, active participation could only be verified for 280 fishers. All subsequent results concern active fishers. Only few surveys were accessed through social media (4%) and of those opened through e-mail the majority was in English (77%) rather than French (23%).

A characteristic of this survey is the impossibility to determine its exact scope. This is especially true for the recreational fishery, of which the extent is unknown and for which we only touched the tip of the iceberg (merely 42 participants). In contrast, a total of 237 licensed fishers filled in the survey (QC: 48, PEI: 62, NS: 81, NB: 24, NL: 6). Newfoundland is largely underrepresented in the survey because of the lack of contact information. This causes bias when looking at the overall results, as this province has the highest landings, which are fully reported (unlike any other region). For Quebec, 125 licenses were active in 2018 (DFO unpublished data), indicating that around 40% of those participated in the survey. The number of active licenses in the other provinces is not known, but based on reportings by vessels a minimum participation rate of 5% can be presumed, as in 2016.

It should be noted that by definition DFO stats only include declared catches whereas online survey landings include both declared and undeclared catches (Table 1). Survey power for licensed fishers can also be estimated by comparing catch reported in the survey (for which purchase slips were received) and in the official statistics (Table 1, preliminary numbers from DFO unpublished data). Note that Quebec is well represented, whereas the Gulf and Maritimes region have a potential lower coverage.

Figure 1 shows that except for NL, the survey had an adequate geographic coverage as most parts of the coastline where fishing occurs are represented. If results for the whole area are used, they should however be weighted by province and if possible by fishing activity or even gear (see below).

In addition to the results below, the final comments given by participants are provided in Appendix 2.

Table 1: Catch (t) declared in the survey compared to official catch statistics.

Region	DFO Statistics	Online survey	%
Quebec	1,240	897	72
Gulf	2,215	447	20
Maritimes	1,341	276	18
Newfoundland	5,626	2,132	38
Total	10,422	3,515	34

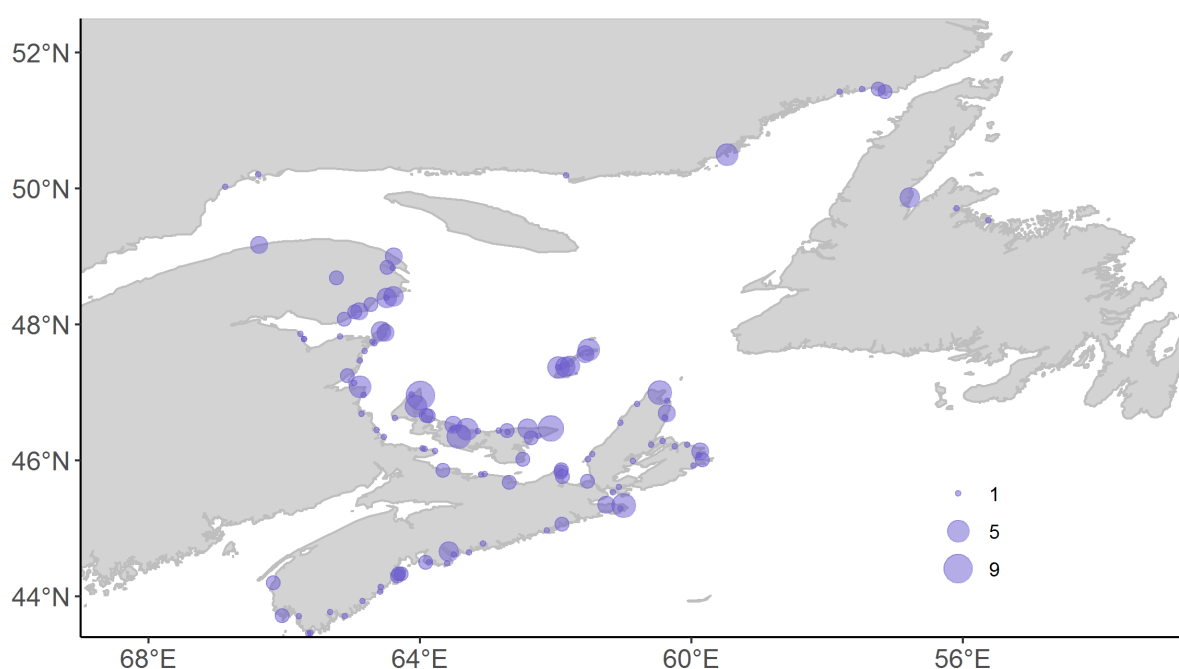


Figure 1. Ports where mackerel was landed by survey participants. Dot size is proportional to the number of survey participants and dots off the coastline result from imprecise answers (Gaspé, Cape Breton, etc.).

CARACTERISTICS OF THE FISHERY

Activity types

Activity types were similar to 2016. Bait fishing was again the most common activity of participants (38%), followed by commercial (25%) and recreational (15%) fishing (Figure 2). When fishing for multiple purposes, bait fishing (on average 57% of the catch) is usually the prime activity combined with commercial (33%) and/or recreational fishing (16%). Only few fishers from Newfoundland filled in the survey, and all were commercial. Many other commercial fishers were from Quebec, as were recreational ones. The activity composition in the Maritime Provinces was roughly similar, with New Brunswick being characterized by little commercially fishing participants and Prince Edward Island little recreational participants.

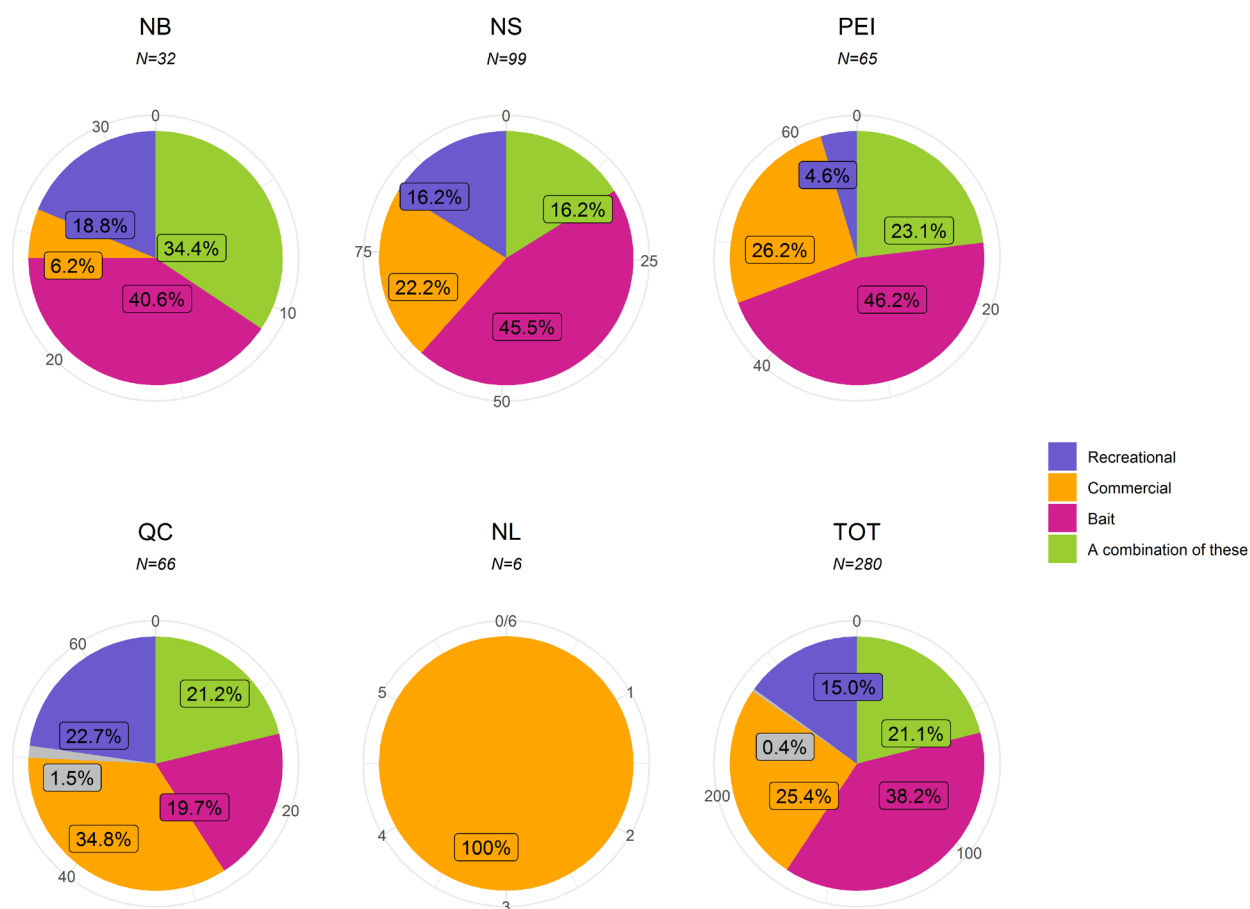


Figure 2. Pie charts showing the repartition in number of the type of fishing activities Canadian Atlantic mackerel fishers (percentages of abundance) reported in the survey, by province (NB; New Brunswick, NL; Newfoundland, NS; Nova Scotia, PEI; Prince Edward Island, QC; Quebec), and for the whole Eastern Canadian coast (TOT). The total includes survey participants from all provinces plus those who did not indicate their province of origin.

Bait use

Most bait fishers used mackerel to bait one other species (64%), although mackerel can be used to target up to 5 species (2 species: 24%, 3 species: 9%, 4 species: 2%, 5 species: 1%). Mackerel is predominantly used to bait lobster, in all of the provinces (Figure 3). Bait mackerel is of second importance to fish tuna, particularly in Prince Edward Island and Nova Scotia. Results show that mackerel was used as bait in 8 other fisheries (Figure 3).

Gear use

Although 1 participant made use of 5 different gear types, the large majority sticks to a single gear (65%). Gear use by participants differed by province (Fig. 4), with an overall dominance of jiggers (147), rod and line (127) and gillnets (94). All Newfoundland participants were seiners, whereas there was more heterogeneity in the other provinces. Gear type reflects in part the activity of the participants, as for instance a higher participation of recreational fishers shifts the gear results more towards rod and line. However, it is possible to identify as a recreational fisher while employing jiggers (5), a gillnet (1) or a handline (1). This year, one person fished mackerel for educational purposes, as part of the training of a sailing school.

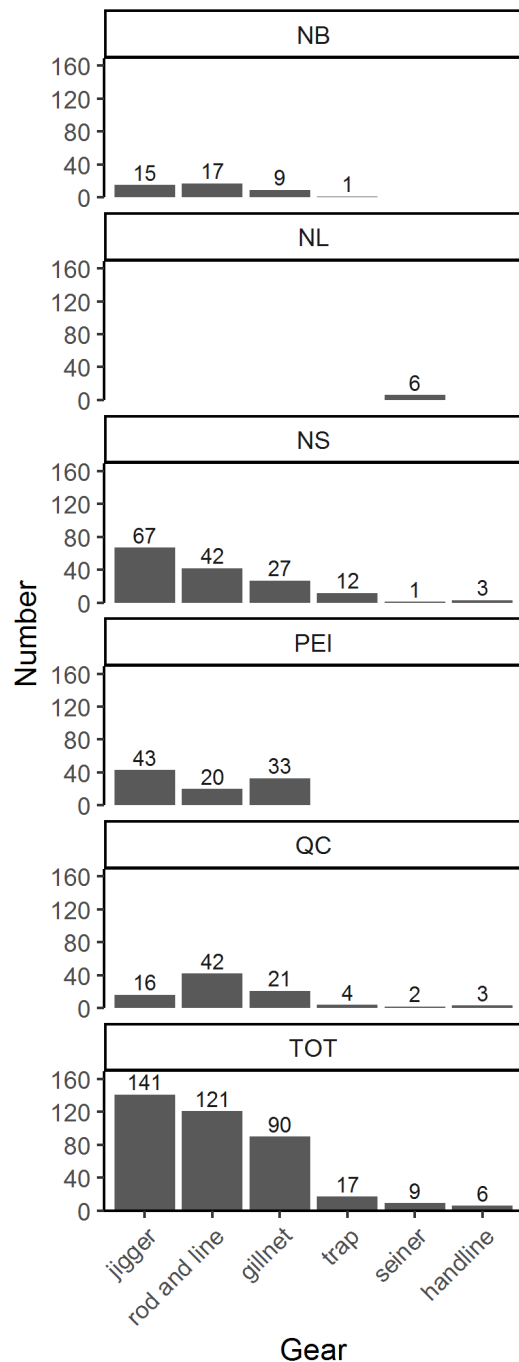
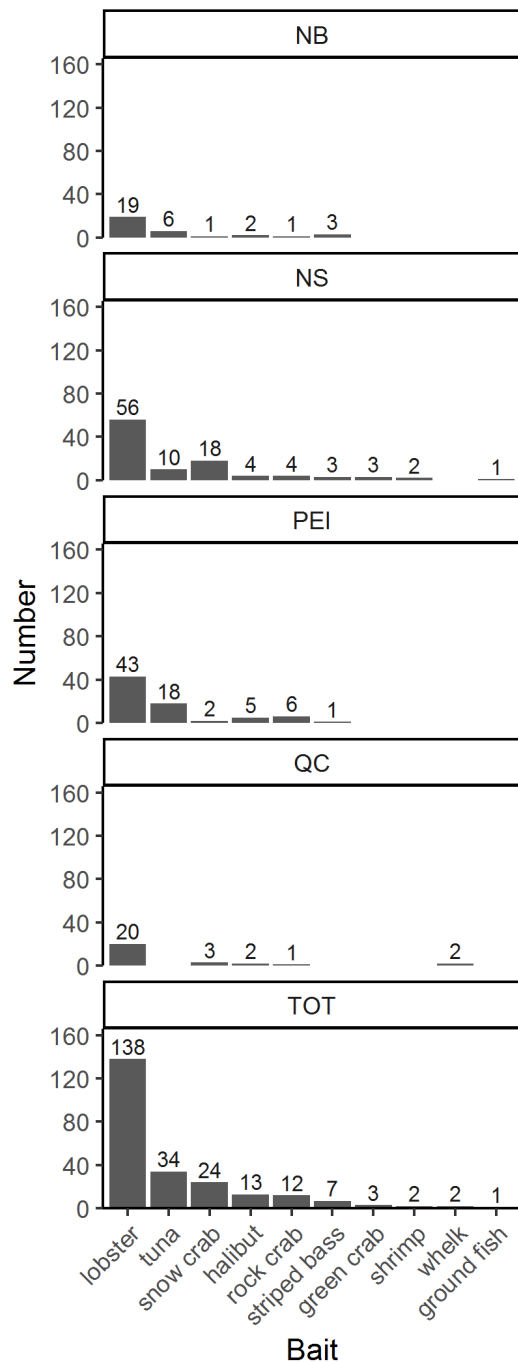


Figure 3 (left) and Figure 4 (right). Barplots of the number of fishers that (left) use mackerel as bait for other species and (right) use each gear type. Numbers are given by province (NB; New Brunswick, NL; Newfoundland, NS; Nova Scotia, PEI; Prince Edward Island, QC; Quebec) and for the whole Eastern Canadian coast (TOT). One fisher is not restricted to the use of mackerel for a single species or gear type, so that the total numbers are higher than the total number of survey participants.

CATCH BIOMASS

All survey participants together indicated that they caught about 4,069 t of mackerel in 2018 (of which a part is not included in the official DFO catch statistics). The large majority of these catches were from commercial activities (3,480 t), whereas smaller fractions were from mixed activities (323 t), bait (255 t) and recreational (11 t) fishing (Figure 5). This contrasts with the fact that bait fishing was the single most common type of mackerel fishing activity (38%) followed by commercial fishing (25%), as was presented earlier.

Recreational fishing is only of trivial importance to the overall catch (0.7%) because of the few recreational participants and their relatively smaller catches (Figure 5). Recreational fishers were however not targeted specifically by this survey and results should therefore be interpreted with caution. As in 2016, results nonetheless showed that the term recreational fishing is loosely used, as catch varied between 2.7 kg and 3.6 t.

Despite that only 6 fishers (seiners) from Newfoundland provided catch information, their catch constituted about half of the total result (Figure 5). In comparison to the 2016 survey results, the importance of commercial fishing in terms of overall catch increased in all provinces, and especially in Quebec. This might be in part because official landings from Quebec in 2018 were indeed amongst the highest in the last decade (DFO unpublished data) and the survey participation rate of licensed fishers in Quebec is likely very high (see section 'Survey power'). By consequence, the relative catch from bait fishing was generally lower, with the exception of Prince Edward Island, where mackerel caught by the bait fishery increased (39%). On average, bait fishers caught 2.4 ± 3.8 t (max: 23 t) and commercial fishers 49 ± 126 t (max: 726 t).

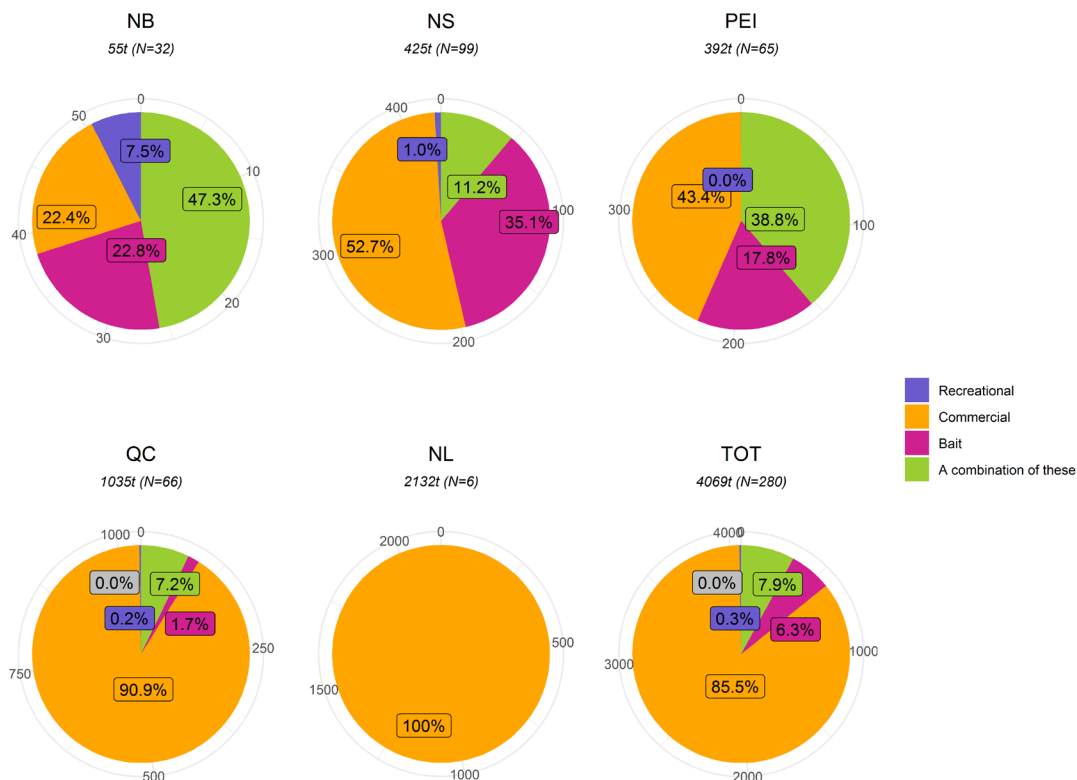


Figure 5. Pie charts showing the repartition of mackerel catches (percentage) by type of activities for each province (NB; New Brunswick, NL; Newfoundland, NS; Nova Scotia, PEI; Prince Edward Island, QC; Quebec) and for the whole Eastern Canadian coast (TOT).

We asked participants directly how much of their catch was used for bait (Figure 6). Results reflect the activity types, as bait use is significantly less than in 2016. That is, only a small fraction of the total catch is used directly as bait (20%). There were large provincial differences, with bait mackerel being significantly more important in New Brunswick (98%), followed by Prince Edward Island (71%), Nova Scotia (68%) and Quebec (14%).

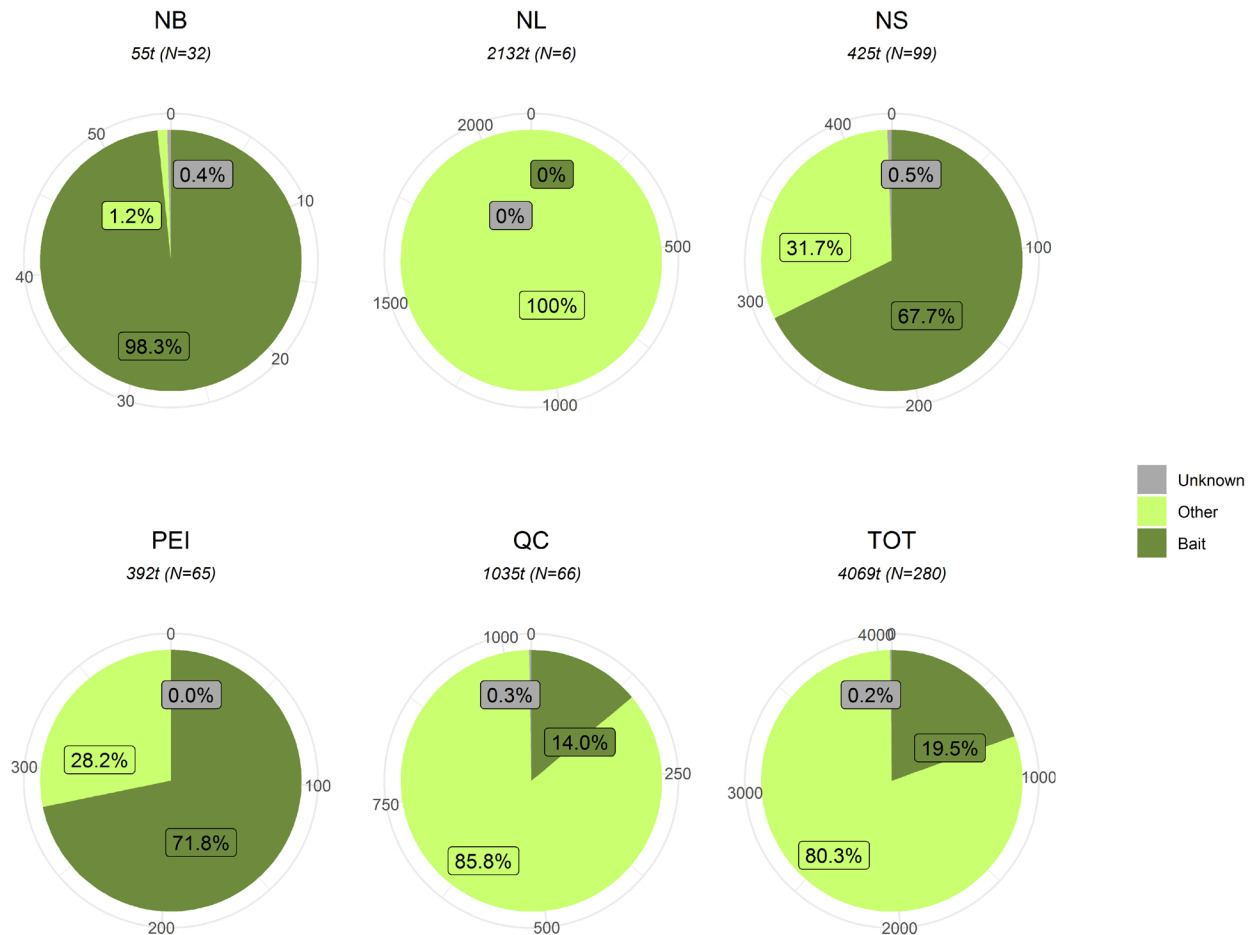


Figure 6. Percentage of catch used as bait (dark green) or other purposes (light green) by province and for the whole Eastern Canadian coast (TOT). Mackerel sold by commercial fishers to a middleman can be categorised as “Other” but still end up as bait.

Provinces with heavy bait fishing typically have significant amounts of catch for which no purchase slips were received (potentially missing catch, Figure 7). Hence, catch without purchase slips was by far highest in New Brunswick (71%) and non-negligible in both Nova Scotia (51%) and Prince Edward Island (34%). Overall, only 13% of catch could be missing from official statistics, but this number is greatly influenced by survey participation from NL. In absolute values, survey participants indicated 543 t of catch without purchase slips, which is less than in 2016 (849 t) when we received however 94 more answers to this question. For only two provinces there was a significant change (>2%) in the percentage of catch with or without purchase slip compared to 2016; New Brunswick (-26%, from 97% to 71%) and Quebec (-18%, from 31% to 13%). This is in large part because relatively more commercial fishers participated in the survey for both provinces. Note that hail-in is used in addition to purchase slips to obtain catch data.



Figure 7. Percentage of catch with purchase slips (green) and without (red) by province (NB; New Brunswick, NL; Newfoundland, NS; Nova Scotia, PEI; Prince Edward Island, QC; Quebec) and for the whole Eastern Canadian coast (TOT). White areas in the pie plots are unclassified catch.

Part of the catch can also be discarded, but only a minority of participants indicated doing so (22%). Total discards estimated from this survey equaled 81 t (in comparison to 30 t in 2016), which is 2% of the all catch. The largest discards were from the commercial fishery, of which the 3 largest were 45 t, 9 t and 7 t (the maximum discarded in 2016 was 5 t). The participant declaring 45 t of discards used a combination of gillnets, traps and rod and line, whereas the other 2 used either a trap or a gillnet. When discarding occurred participants often noted that this was because of undersized fish.

COMMENTS FROM PARTICIPANTS

All comments (even from inactive fishers) are provided in Appendix 2. Recurrent concerns (in order of their stated frequency) are related to the seining fleet, small fish size, law enforcement (control on e.g. legal fish size), unregulated recreational fishing and minimum fish size. Occasionally mentioned (>1) are the quota, the timing of spawning in relation to the opening of the fishing season, the potential existence of a third contingent, seal predation, wasteful discarding and the northern pulp mill pipeline.

COMPARISON TO 2016

In order to make a parallel with the last time the survey was conducted, we asked fishers if they remembered prior participation. For at least half the participants this was their first time filling in the survey. However, a large number did not remember (38%). Only 11% confirmed that this was their second partaking (Figure 8). Therefore, results might be difficultly comparable if sample size is relatively small or unbalanced, which we cannot adequately verify. Survey results of both years were however roughly similar and discrepancies matched expectations, proving that results have a reasonable level of consistency and that bias introduced by sample size and composition might be small (with the exception of Newfoundland).

Note that differences in survey results (e.g. participant composition) might have various underlying reasons, other than sample size. In 2016, most survey answers were obtained much earlier in the year, survey spreading was somewhat different (in 2016 using radio and newspaper articles, in 2018 relying more on regional managers) and overall circumstances were different. For instance, 2016 was the first year in which a fishery closure occurred (the TAC was reached) and in 2018 other mackerel surveys took place simultaneously (targeting recreational fishers).

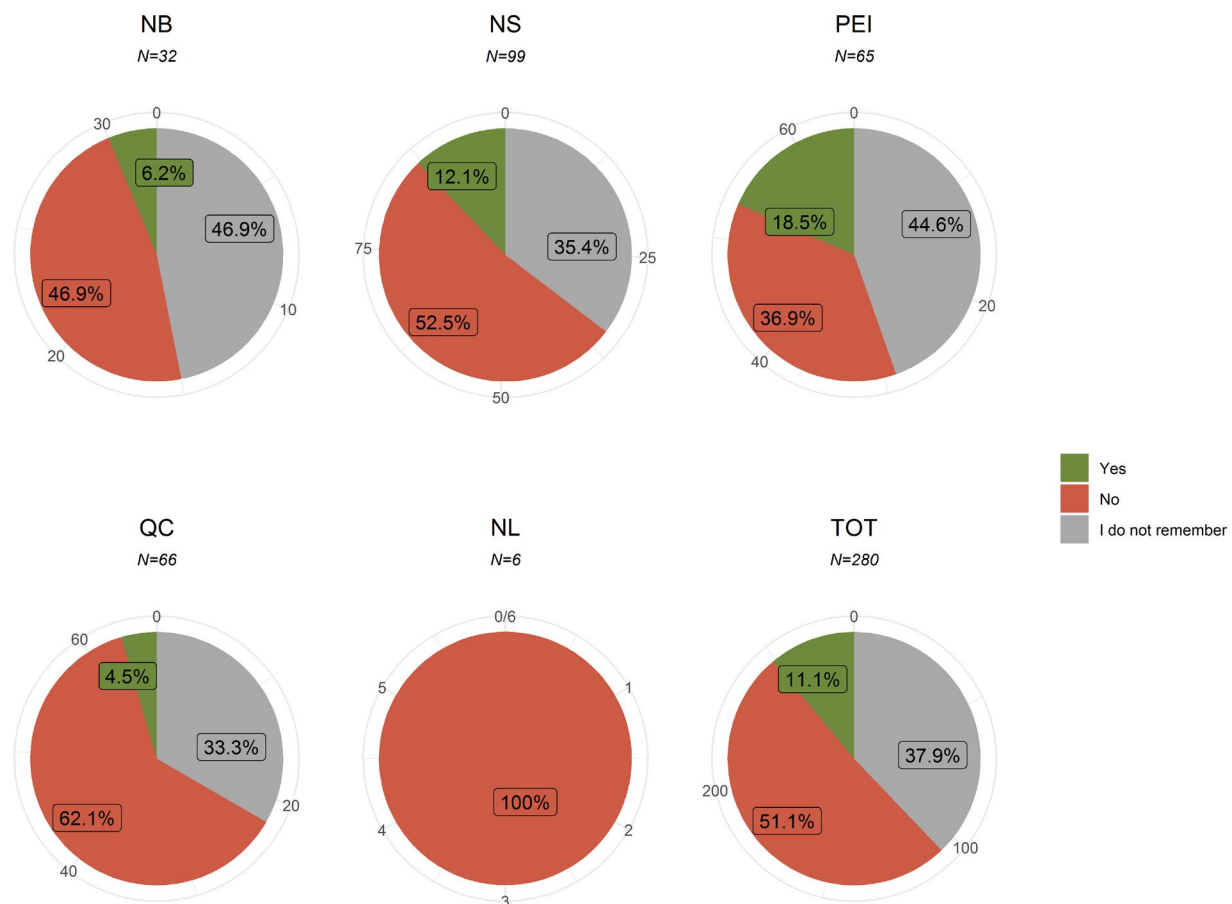


Figure 8. Percentage of participants who participated to the informal online mackerel survey in 2016 by province (NB; New Brunswick, NL; Newfoundland, NS; Nova Scotia, PEI; Prince Edward Island, QC; Quebec) and for the whole Eastern Canadian coast (TOT).

SURVEY USES

The goal of this survey was to update knowledge on so called missing catch from Canadian commercial, bait and recreational fishers. Results can be used in different ways. To estimate mackerel stock biomass and state, the current assessment model requires an upper and lower limit of true removals to be specified. The assessment is to a certain degree sensitive to these limits, so that informed bounds are important to avoid for instance spurious catch estimates (Van Beveren et al. 2017b). Survey results might also be used to help estimate missing catch directly (set at 6,000 t in 2017, Doniol-Valcroze et al. 2019), which is set complementary to the TAC. This is especially true now that results appear relatively stable. Nonetheless, in 2016 the assessment model was used to estimate this number. Although this method was highly objective, there were some important pitfalls (e.g. sensitivity to natural mortality changes, model parametrisation and years in the assessment) and a model-free approach to estimate missing catch might therefore be preferred. In such case, survey results could for example be extrapolated by province to provide rough estimates of missing catch for the bait and commercial fishery.

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APPENDIX 1: SURVEY

Informal survey of Canadian Atlantic mackerel commercial, recreational and bait fishers

I am a post-doctoral researcher from Belgium working in Canada on northwest Atlantic mackerel, together with scientists at the Maurice-Lamontagne Institute (DFO). In order to better estimate the size of the Canadian mackerel stock, I would like to have first-hand experiences of commercial, recreational and bait mackerel fishers on their activities. With better estimates of the mackerel stock size and its productivity I hope to be able to provide better management advice and stock predictions.

The survey consists of 6 small parts and for most of the questions (about 12) there is space to write an explanation if you wish (and appreciated!). Unless specified otherwise, all questions concern the 2018 fishing season.

Results of the previous [2016 survey](#) are online and were incorporated into the 2017 assessment, providing quantitative information on catch sources that are not necessarily recorded.

This survey is completely anonymous and personal identifying information is not even collected by me. However, all anonymous results will be made publicly available via the [CSAS website](#).

I would like to thank you in advance for filling in this survey. Please feel free to contact me by email or phone in addition to the survey.

Elisabeth Van Beveren

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418 509-0563

1. Fishing activity

Q: How would you classify your fishing activity? (Multiple choice)

- ☐ Commercial
- ☐ Bait
- ☐ Recreational
- ☐ A combinaison of these
- ☐ Other: ...

If bait:

Q: Please indicate the species for which you catch bait mackerel (Checkboxes)

- ☐ Snow Crab
- ☐ Lobster
- ☐ Rock crab
- ☐ Tuna
- ☐ Striped bass
- ☐ Other: ...

If a combination of these:

Q: Could you provide us an approximation of the proportion of catch attributed to each of your fishing activities? (e.g. 10% of the mackerel I caught was during bait fishing and 90% when fishing commercially) (Open answer)

2. Gear type

Q: What gear type do you use? (Checkboxes)

- ☐ Tuck-Ring Seine
- ☐ Seiner <65' (<19.8m)
- ☐ Seiner >65' (>19.8m)
- ☐ Other Seine
- ☐ Gillnet
- ☐ Trap
- ☐ Jigger (including mechanized jigger)
- ☐ Rod and line
- ☐ Other: ...

3. Area

Q: What is the region where you did most of your fishing? (Open answer)

Q: Where were the fish landed? (Open answer)

4. Catch weight

The next couple of questions are about the quantity of mackerel caught, and what happened with them afterwards. I am aware that it might be very hard to provide an exact number, but even a rough estimate would be of great help (especially if this is commented in the answer!). Remember that all questions are related to the 2018 fishing season.

Q: How much mackerel did you approximately catch during the 2018 (lb per season)? (This might for example include catch that was not landed, used as bait or for personal consumption). (Open answer)

Q: Could you please indicate for what percentage of your total catch (or lb) you obtained purchase slips? (Open answer)

Q: About how much of the total catch (lb or %) was used as bait (for personal or someone else's use)? (Open answer)

Q: Is there a part that might not have been landed? Would you be able to provide an estimate of this (lb or %)? (Open answer)

5. Experience

Q: For how many years have you been fishing mackerel? (Open answer)

Q: Do you believe that the proportion of declared landings (for which you got a purchase slip) changed over those years? If yes, did it increase or decrease? (Open answer)

Q: Did you fill in this survey in 2016 as well? (Yes/No/I do not remember)

Comments

Q: If you have any comments about the survey or mackerel fishing, feel free to note them down below. (Open answer)

Thank you very much for your participation in this survey, your knowledge will be of great help to me. You should note that, whichever the fishery, a more complete accounting of catches will allow scientists to provide better stock assessments. I repeat that this poll is completely anonymous.

APPENDIX 2: COMMENTS

Table S1: All comments provided by the survey respondents. Comments such as “no comments” or “did not fish” were removed and identifying information (names, phone numbers and locations) was replaced by “X”. Comments are in the language received.

nbr	comment
1	seals are big trouble
2	There should be a stop to all fishing if they have roe in them . You can not take all the mothers and unborn babies and still have a healthy stock.
3	I feel we need to get a handle on the amount of unreported bait fish which is now being claimed as recreational.
4	mackerel fishing should be limited in spring when the fish is ready to spawn example april to june
5	In this eara we need Mackerel (X)
6	I live in X NL we fish crab 60 to 100 miles east off this area we have hauled mackerel up in our crab pots in late May an early June an also got mackerel in our shrimp trawl some 160-180 mile north to north east of here in mid August to mid September I’m a strong believer the mackerel on the north east coast of Newfoundland comes from across the Alantic from Norway an other areas that way
7	Min size should be 300 mm at least to many small fish caught before reaching sexual maturity 263 is a ducking joke and you guys at fisheries say no at 263 is good but that fish that is scoupped upon the fall by seines wasn’t 263 in spawning season June
8	I feel that mackeral quota should increased by 100% at least. fishing season for mackeral is very short now because there is not enough quota given by dfo.
9	I feel unless the overall TAC increases I will never get the chance to fish mackerel again.The time mackerel appears in my area that I'm allowed to fish the quota is taken. Mackerel is just arrived now in X getting them has by catch in herring nets.
10	I'm a fixed gear fisherman so unless the quota returns like we had in the early 2000's I don't anticipate I will get the opportunity to be able to commercially fish mackerel again given the overall TAC is taken before mackerel appears in my area
11	This past September and October we have seen the biggest abundance of mackerel than was seen in the last 10 years. The size of our mackerel caught this year was mostly 400 - 600 grams with many 600+. Also, in October we were seeing large schools of small mackerel (8-13 cm) which I feel argues that Newfoundland has its own stock or additional biomass. The migration pattern observed seem to show that the mackerel was coming in from the East from offshore in the deep water instead of the Gulf and Straits area where they swim along the shore to the south. I fished mackerel from the 5th of September until the quota closed in October with the abundance of mackerel on the last day still increasing and are still being seen 3 weeks since the quota closed. I feel the 10,000 tonne quota this past year does not reflect the true abundance of mackerel that have been seen here in Newfoundland this year. DFO science needs to do some research on the migration patterns and cycles on the mackerel of Newfoundland's east coast and also on the origin of those small mackerel we are seeing. Thanks.
12	I do believe the TAC needs to be raised.
13	I think boats should have individual quoats like the crab industry and if someone doesn't want to use their quota , they could sell it to someone who wants it
14	Survey not deep enough, more on size thats being caught. Lot of fish has been destroyed snd dumped due to auto jiggers, too many flies

nbr	comment
15	Stop the seiner for a few year just allow jigs and they will be lots of mackerel for all fishermen and all species before its to late
16	I believe more science has to be done and in different locations at different times other then what is being used now to predict the stocks . We have seen dramatic changes in when the fish arrive in are area and and size differences for that time specific time of the year. From what I personally have seen in the past years is a increase in the amount of mackerel but a decrease in size and a change in when these mackerel ard in my location. As a new licience holder This is a fishery I am planning and hoping to maintain and take full advantage of for years to come and I will do my part in any way to insure this happens.
17	Seem to be more mackerel this season but not big in size ,later in the season
18	En prenant compte de l'augmentation de la temperature de l'eau il peut sembler quelques fois que le maquereaux n'est pas en abondance cependant dépendament de la temperature de l'eau et des courant des journée sont bonne et d'autre moins.Dans notre region ma derniere pêche a été fait le 06 oct et le maquereaux était en abondance et aussi beau (jumbo) tres rare d'attraper du maquereaux a cette date tardive pour nous.Ce qui nous fait dire que nous allons peut être adapter notre pêche en consequence.
19	We have seen migration habits change As they seem to be staying off shore in the early season either because of weather and or seal predation. There doesn't seem to be a pattern for the Mackerel migration in this Area as it varies from year to year
20	have been fishing for 40 plus years and seen over the years swilling on top of water and showing on sounder bait seen this yea r gulls picking of top of water fish used rod and reel and caught 3 mackerel about 3 to 4 inches long and very slim returned to sea
21	Please raise the minimum size to 12" and put stricter limits on recreational fishing.
22	there is more small mackeral the last few years ,possibly due to a changing climate
23	I have seen a large decline in the amount of mackerel I'm catching and hope there is a way to record this recreational catch and set a bag limit to help it grow again.
24	STOP LEAVING OTHER PROVINCES CATCH AND KEEP SMALL MACKEREL. EXAMPLE: PEI there has been videos of them catching and keeping small makerel around 8 inchs and under this is unacceptable
25	This fishery is over fished and should be closed for a few years,to give them a chance to regain there stocks.
26	2018 was very good for me that was just 4 days of fishing
27	There is a lot of small mackerel around in the fall of the year in the X area i seen a lot mackerel in the last 6 years.
28	It hard to make send of what DFO is doing with the mackerel stock because the (hall in) system is not apply all trough the Gulf and the legal size is only apply in the Quebec region
29	You should be more specific about th eregion maybe ask whick MFA - not region
30	Stocks have decreased in a short period of time based on scientific data. There does appear to be more juvenile mackerel around in the summer and fall months in the Northumberland Strait than in the past. That is only an observation. The stocks fell in a relatively short period of time... Is that a result of over fishing or an environmental issue?.... Something that appears obvious is that mackerel stocks were good until they started being targeted much more frequently by the seine fleet in Canada and the U.S.A . Perhaps I am wrong but the same thing occurred with the Herring stocks... We actually stopped seine fishing years ago for Herring and the stocks recovered. When licences were reissued a

nbr	comment
	steady decline of stocks occurred again. Maybe there is a link????... We all have to have ownership of our stocks and our part in protecting the future of our industry and the species itself. As fisherman, sometimes it appears that the answer to a problem stares us in the face, but both us and governments look to avoid the obvious, we search for solutions that suit us, at the expense of fish species.
31	I have a license to fish mackerel but only go fishing it for a feed...😁
32	I only fish mackerel with two nets when lobster fishing. Buy the rest of my bait
33	DFO and the Federal government ass to do a lot more to protect the fishing habitat
34	For the last 6 years I seen a lot of small mackerel in the fall in October and November in the X Nova Scotia.
35	there is no way to fish mackerel without damaging the small size ones what comes aboard the boat is dead even the under size
36	fish was big at first but got small at the end
37	Alot of mackeral this year most we seen in years very little fishing effort needed
38	In 2018 there was a good sign of mackerel in this area first part of season was very big fish but later was all sizes
39	Not enough charges for landing small fish in commercial fishery
40	Most too small
41	There should be no mobile gear allowed in any fishery (including seines) as fish cannot compete with today's modern electronics. Hook and line or fixed gear only
42	a lot smaller now ,I remember only used 3 in . nets and now 2 1/2 , but a couple years ago I had one day end of april that 3 nets had 10 crates of the biggest kind ,but not anymore . thanks
43	the mackerel in our area has realy dropped small until late maybe middle of oct, on
44	The fishery is a Joke right now
45	Commercial season should be shut down completely. Fishing for bait only should open in September close in December. The mackerel fishery is in serious trouble.
46	in our area the mackerel are very small in the last 15 years
47	The mackerel fishery in my area , the X NS is healthier than it has been in years past. Lots of small fish and an abundance of larger fish as well
48	need to make the seiners in nfld go to hooks or gillnets , them wrapping up an entire school of fish and filling the quota in under 2 weeks is no good for anyone , fish or fisherman
49	It's about time to start properly enforcing fishermen hygrading small mackerel out to sea just throwing them over as dead discard. If we don't take care of the small ones we will definitely have no future and from what is left of the stock in the gulf we are on the edge of collapse like every other fishery we have ruined
50	I think if we only needed ONE hail out number per year for our personal (fresh daily) bait you would receive more accurate information,. Now 2018 if you forget to hail the next months out number ,you can't report catches ,the. Monthly logs now require that number.changed from previous years where you only needed a starting hail out number for bait..
51	In our area the landings are taken into account against the tac. But our landings are not taken into account for stock Assessment. That seems to only take place in the gulf region and south shore
52	I have seen a increase in size and quantity since 2016
53	Fished commercially 2000 -2012 but just recreationally (feed) since!

nbr	comment
54	There should be a better control on the size of mackerel that is allowed to be caught
55	I feel the biomass for mackerel is larger then scientists believe. this year there were areas with a high percentage of small mackerel. I could stop anywhere with my handlines and fill my hooks with small mackerel.
56	This I the first year in about 5 years that I've seen mackerel schooling on the water in my area but still nothing close to what it was
57	When I get home in a few weeks I will double check my landings for this past season to give you an exact number of pounds landed. I have it all on my logsheets home. What is your email? Also there have been major improvements in mackerel industry on PEI to report catch rates, effort, enforcement, etc. I also participated in a study this summer providing samples of frozen mackerel and data on where they were caught to DFO to help gain more information on stocks.
58	Seining mackerel right on shore where they are trying to spon is not right
59	We've been catching our own bait here for generations none of which is wasted if not used this season remains frozen for the next. I do not sell fish and only catch what is needed for myself. Have noticed an increase in the spring mackeral here as well as the fall fishing in the last several years. It's not little guys like me hurting the stocks it's always been the commercial side of this fishery. Thanks
60	Should not be allowed to purse seine and put a minimum size for gill nets (like herring nets)
61	Drastically declining due to seining.
62	All good. Good to eat and great bait
63	Recreational fishing should NOT be allowed to catch 1000 lbs a day. That's why there is no mackerel.
64	Fish are smaller and stock greatly decreased; fishery should be shut down until stocks are healthier.
65	If Canada and the USA ARE fishing the same stock of MACKEREL why is it that we have 10'000 lb and the USA have 20'000 lb to catch . Why are we growing fish for other countries , and we here in Newfoundland are not allowed to go bait fishing when the other provinces can . SHAME ON CANADA
66	I believe that the scientists dont understand that we have our own stock of fish on the North East coast of Newfoundland, that is separate from the southern gulf. The bodies of mackerel i seen this year was the most i seen in the past 10 years.
67	The amount of mackerel on the NE coast of NL in 2018 is unbelievable. For all the 20+yrs I have been fishing, I have never seen as much as this year. Also there is a massive abundance of small, 4-5 inch Mackerel in our waters. Our NE Coast Mackerel fishery is cyclical. We have years on no fish and years of plenty. It has been this way for years. From 2011 -2015 we landed basically no Mackerel. In 2016 they came back. Now it appears we are on the up swing for a few yrs but we have no quota. If you would like to further discuss The NE coast Mackerel fishery contact me . X
68	I have witnessed as mackerel in recent years as I have in past years. Some years are down and other years are up in landings. Normal behavior for mackerel in NL.
69	Mackerel are either diminishing in numbers or are mainly in Newfoundland and Iceland now instead of here.
70	Si quelqu'un doit être couper en cotas ou pénaliser a cause de la baisse de la masse de l'espèce, ce sont les bateaux usine qui donne aucune chance a l'espèce et malheureusement ce sont les petits pêcheurs comme nous qui en subissent les conséquences... très dommage !

nbr	comment
71	Les acheteurs de maquereaux pourraient être de très bons spécimens pour vous mais malheureusement cette pêche est secondaire et les pesés sont rarement comptabilisés. Ceci est mon opinion. Je sais que l'ACPI de Lameque achète du maquereau à chaque saison et on surement une traçabilité quelque part de la Provenance du produit. On achète les maquereaux (très rarement pour mon cas) de notre usine souvent en provenance de pays étranger. L'usine achète habituellement le produit dans l'hiver ou quand le prix est optimum pour l'achat.
72	J'aimerais voir une limite de capture par jours pour la pêche récréatif
73	On a besoin du maquereau pour l'appât pour pêcher le homard . Toutes les restrictions (paye le passage à quai 60\$ par jour, être obligé de revenir au quai le matin avant d'aller pêcher nos cassiers à homard pour passer le maquereau) ça oblige les pêcheurs de ne pas déclarer leur prise et ça décourage les pêcheurs de pêcher le maquereau
74	Plus de surveillance du Mpo
75	Il y avait beaucoup de petits maquereaux, donc bon pour l'avenir !
76	Cette pêche est nouvelle pour nous et cette année le bateau n'était pas disponible lors de la saison de pêche à cause d'autres activités et entretien du bateau (installation d'équipement pour l'aquaculture). Nous espérons nous reprendre en 2019.
77	RIEN A COMMENTER SAUF LES PHOQUES ET LES BAR RAYÉ QUI BRISENT NOTRE EQUIPEMENT
78	Le poisson est petit et il y en a de moins en moins
79	Les débarquements varient selon la disponibilité du pêcheur pendant le temps que le maquereau est dans le secteur, et de l'expérience de pêche ici durant les années .
80	pour ma première saison je trouve ça bon 4000 à 5000 lbs par débarquement en moyenne
81	J'ai utilisé 20 000 lb de maquereau congelé
82	je suis pêcheur de homards qui achète du maquereau à l'usine pour appâter les cages.
83	Ici à Miscou 95% des pêcheurs ont arrêté de pêcher pas beaucoup de maquereaux mais en 2016-17-18 beaucoup plus de maquereaux
84	Un gros manque de vérification de la ressource.
85	D'après moi le pêcheur commercial et puni, du à la pêche récréative..comme toute autre Pêche récréative ou (chasse) au NB L'achat d'un permis, et surtout une LIMITE DE CAPTURE et obligatoire.. Extrêmement de gaspillage dans la récréative ..et on perd une belle occasion de ramasser des fonds pour l'étude...regarder la morue 5 captures par personne entièrement suffisant..a imposé une limite de maquereau sur la récréative serait un pas de géant... Merci
86	Si cette enquête est en fonction de redistribuer la ressource,,,, ici il y a du maquereau périodiquement, mais les acheteurs pour l'instant ne sont pas tellement intéressés, mais cela pourrait changer prochainement,,,Alors ne pas donner tous les quotas pour d'autres régions, cela ne serait pas gentil Hi Hi hi
87	Beaucoup trop de gaspillage sur les quais. Et le maquereau beaucoup trop petit.
88	il devrait avoir un contingent plus sévère pour la pêche commerciale mais la pêche pour appât et récréative devrait rester intact !!! on a pas une espèce en danger avec une pêche récréative merci
89	à la ligne à main ou machine électronique le maquereau serait en sécurité tous les pêcheurs devraient être au hameçon car c'est un moyen de pêche sélective oui ça arrive de perdre du petit poisson mais un changement de place et le gros est toujours pas trop loin

nbr	comment
	<p>les senneurs m ont toujours énérvé cote ressource pas trop long qu il vide un banc avec leur système plus que performant tandis qua la ligne le maquereau mord quand y'a faim il n est pas encercle</p> <p>un petit commentaire don je pense et je vous en fait part</p> <p>de ma part a moi le maquereau est en augmentant ds le golfe</p> <p>merci et bonne chance ds votre enquête informelle</p> <p>bien a vous X</p>
90	I found some questions not thoroughly explained enough.
91	For those who fish recreation should be let untouch ,it is very little and community tradition
92	Should be very closely watched as it's getting harder to catch mackerel. Seiners should not be allowed. Herring fishery should be shut down totally for a few years as well.
93	There still seems to be lots of mackerel but there is no commerical market in X
94	lots of small, not a lot of big
95	they shouldnt be able to seine mackerel in our waters..or mid water trawls.i feel they take in too many small mackerel
96	The amount of by catch was down this year
97	<p>Due to global warming and drastic quota cuts the opportunity to land mackerel in this area is almost impossible.In the last couple of years the fish haven't showed up in this area(X) until late November and by that time the quote is already taken.After the quota was taken this year we went to X to fish our herring quota.While we were steaming we past several schools of mackerel on the surface.A few nights later while looking for herring the whole fleet were seeing massive amounts of mackerel. One night in particular while fishing near Xu in 20 fathom of water we had 18 fathom of mackerel under neath us and a full scan on 600 feet at 360 degrees.I called our union member (X)that night and told him about the fish we were seeing.There was strong winds for the next few days preventing us from fishing.By the time the weather subsided the mackerel had moved on.If the weather pattern continues as it did in 2018 and mackerel not showing up until late November early December we will be out of a fishery.We tried to explain this at a fishery advisory meeting in Quebec in 2016 and recommended a 36,000 ton quota but the scientist advised the minister to give us 10 thousand ton for five Atlantic province.If the scientist don't listen to the advise of the fishermen and our union "FFAW" and "DFO" then who do we turn to.</p>
98	I believe there are is a very strong abundance of undersize mackerel in the Gulf. The most we have seen in years , so the future stock looks good ,it is just a question if they are staying or not in the Gulf or not.
99	We need to increase min size of allowable catch more selective gear and o discard of small fish
100	Year over year the fishery changes much more rapidly due to global warming and changing environmental conditions. 2018 was certainly one of the most difficult years for mackerel fishing in this area X for more info if u wish
101	In 2018 our catch was down by 60percent from the previous 2 years. This is because the season opened June 1st in 2018. A full week to late. The best of the fish had passed by before we were allowed to fish. I believe that since the X is a selective fishery (only catching the large mature mackerel) we need to open the season around the 24th of May.
102	The reason the selling catch has gone down is because the buyer who we sell the mackerel to only buy later in the fall (starting around September 7). The buyer use to buy right after lobster season ended(here July 15.)

nbr	comment
102	I would like to give input call me x
103	I only fished mackerel for bait n personal use.
104	there should be a minimum mesh size of 2 3/4 inches on gill nets. minimum size on hand lining is way too small 10 inches fish is not mature enough some fishers are fishing over their limit of allowable fathoms of net on their license
105	Mackerel were just to small this year where I fish so I left them swimming for another year.
106	I strongly feel that this fishery is being abused with a huge amount of fish being wasted. If this is not taken serious, it will be destroyed the same as all species that I was involved in over the last 35 years (Cod, Hake, Blackbacks, Flounder, herring etc). I feel they are not plenty enough the past few years to bother with it. I have been fishing for over 30 years.
107	Stop the seiners, they are the ones killing industries!! The small fish protocol for seiners is the same to my knowledge as it is for inshore hand line boats. 10% of 4-50 fish samples 20 small fish out of 200 requires to either move or stop fishing.. most aren't aware of that and only go by total boat catch which is NOT right!! .. also the Newfoundland seiners don't even use that guideline and are only deducted in catch at the plants they offload at(I heard that directly from a fisherman there) he didn't even know what the DFO small fish protocol was!!! DFO PEI has been really stepping up to enforce the fishery here, but if other provinces like Newfoundland are able to take whatever in, then anything we do here doesn't matter! Also #nopipe!! The northern pulp mill pipeline plan will effectively kill ever species that lives/feeds anywheres close to it! That pipeline project CANNOT HAPPEN!!! And every side of DFO , industry and environment needs to stand up to this!!!! I'm also fully in favour of helping with and supporting some sort of tagging/science led project to put info behind the mackerel stocks and have no problem offering up my 45' boat to do any projects that will better any species in my industry!
108	I fish mackerel July August. It seems better them two months. I know the inshore fishing fleet has no affect on the mackerel stocks as you do to. What I catch for the two months a seanier catches in three hours witch you and government already know. We need an increase of mackerel quota to survive. Time to get rid of the seaniers and put many people back to work. Hook and line fishermen should not be on the same quota as a seanier a no brainer. All about politics and I for one don't care about politics. Doesn't matter to me who runs the country. I could go on forever but not going to. Lots of mackerel just the wrong group of people running the show. I am sure government and science will soon put us out of business.
109	Seems like alot more mackerel around now,then there was 10 years ago.And bigger mackerel, going from the amount people catch off of home compared to 10 years ago.
110	Yes I wish you would ask about the Northern Pulp issue. A real issue becaue if this pipe goes into our Northumberland Strait there will be decreases in all fish habitat until all stocks are gone forever!!!!!! Do something that matter! Speak out against this. Come on!!
111	there were very few mackerel in our area and what were there were small
112	My opinion is the big seiners are destroying the mackerel catching them in the Gulf over the last five years you can't catch a legal size mackerel
113	There is lots of Mackerel in our area, quit tyeing to cut the Quoata. If you want to conserve the Mackerel fishery, quit allowing factory ships gobble it all up. This is good for noone.
114	Lots of mackerel out there to catch
115	mackrel only fished for tuna bait
116	I believe that the stock is smaller now then previous years. I also believe this is due to warming water temps. This summer was the warmest surface temps I have ever saw in the southern Gulf.

nbr	comment
	In my opinion the bait fish, Mackerel and Herring, are moving North to find cooler water.
117	Big off shore draggers are catching it before it gets to us
118	The mackerel that I caught this year seemed to be a bit larger than the last few years
119	Seine fishing has to be stopped. Newfoundland is single handle destroying the fishery. 100 perfect dockside monitor
120	The quality and size of fish caught during the summer and early fall is inferior to that of what is available later in the fall. Large seiners are catching the bulk of the quota and the fishery is being shut down before we get access to the better quality product available in November
121	Should be no seines allowed only hooks and gill nets
122	Net fishery should be closed in spring when they are spawning
123	We have to stop catching the smaller mackerel and even shut the bait fishery down at certain times of the year to give those stocks some relief!!!
124	in 2018 DFO would not allow us to go fishing for mackerel until June 1 I feel that we missed out on some good catches because of this
125	the fisherman that does this for a living got less rights than the recreational people read the rules they are stupid
126	Some questions I did not answer because this past season I was a crewman on another enterprise but our mackerel landing were significantly higher than the year before we fished with trap and our trap was put in the same location as each year before the size was good with a percentage of really large fish I think we landed around 500,000 lbs
127	Hand line is best way to catch since less waste
128	The whole East coast must be shut down to allow stocks to come back. And I mean every fishery. Seiners to hand liners. It's no point in only closing down areas around PEI let's say. And allowing seiners in Newfoundland to still fish. And it's also not feasible to close down the Newfoundland seiner fleet but allow other areas to hand line. A complete closer until stocks come back. Then opening up a gill net fishery/hand line fishery as they are the easiest to target legal size. Without harming so many juveniles. There was not a great amount of legal size around. A lot of undersize in 2018.
129	I charter fish. So I usually only catch 12-15 mackerel for live bait on days that I go fishing. What I don't use is still alive and is released at the end of the day
130	fishery is a thing of the past no fish few boats fishing. wiped out by seine and small fish on hooks. we catch no juveniles in 2 7/8 gill nets.
131	we are inshore fishery. We only use most of the time are hooks and line so there are the different on selected fishing and sein
132	The mackerel fishery should be closed for a few years so that the mackerel can grow.
133	Stocks have greatly decreased Partly due to the landing of small fish
134	STOP the seiners, and we will not have any trouble in this fishery
135	What kind of shape is the mackerel stock?
136	i am very sorry to inform you I do not have a mackerel licence thank you
137	We anticipate participating in this fishery using my trap license, bait license, as well as the recreational fishery in the near future.
138	don't agree with the haul out haul in every day for catching mackerel for bait, at the end of every week should be fine

nbr	comment
139	I was down a little last year as the season only open the 1 of june. I would like to see it open no latter then the 25 of may.
140	the fish are small
141	THE PERCENTAGE RATE IS TOO HIGH FOR BAIT WHICH I MEAN 10 PERCENT UNDERSIZED IS TOO LOW OF A PERCENTAGE FOR LOBSTER BAIT. SHOULD BE ABOUT 25 PERCENT FOR BAIT FISHERS.
142	No mackeral this year.Only small undersize.Every year there is less.Can't catch them with seines and expect to have a future.Just look at the herring fishery.But that don't matter to government because they dont' care about the small inshore fleet.As long as the big company owned vessels can vacuum the bottom.
143	Mackeral go in cycles. Up and down. The last few years there seems to be a lot of small Mackeral. There are a lot less fishermen fishing Mackeral now that's why you don't see any big numbers. They don't seem to stay in one place for long. Always moving. Hard to catch. The gill nets will never fish it out.seiners however will when they are schooling. Minimum size should be a little bigger. Net size should be no less then 2.75. Thanks.
144	There is a large abundance of smaller Mackerel in our area
145	The fishery should be regulated more somehow, possibly with more selective gear i.e larger mesh size. Maybe a small size limit on mackerel should be imposed.
146	I have not utilized my bait licence as I have not used my ground fish licence
147	I feel that mackerel are over fished with draggers,so are capolin,herring,E.X.T.,
148	All seiners should be stopped , the amount of small fish caught is horrific, it's not unusual to see mackerel no bigger then a smelt in the bait tubs , I refuse to by this bait for that reason , all fish should be fished using gill nets , making it a more select fishery and not knocking whole schools of fish in one set , when will we actually try and save the fishery !!!!!!!!!
149	I have not or will not be fishing mackerel
150	What is the problem with our fishing is the seiner
151	we fish 2 7/8 gill nets so that is a big mackerel everything else goes through the nets .the seiners and hand lines on the other hand land everything from small to larger sizes .our window to fish mackerel is very small .anywhere from 10 to 15 days depending on the weather ,sometime less .so i dont see how the gillnets are doing as much harm as the seiners .??you tell me .
152	There is no way for anyone to fiqure out how many mackerel there is. Nobody has any idea how much has been landed on the "black market" (a lot!). Recreational fishers doesn't even have to log anything. A lot more "recreational fishers", then anybody even realizes.
153	I would like to know why there is such a decrease in mackerel. Insead of picking on the fisherman that use it for bait stop the seiners and draggers.
154	the decline in mackerel came when new found land started handing out sein licences like candy on halloween thats where the problem is it was unlawful act mackerel is federally controlled fishery but some how nfld took it upon them selves to by pass federal law and issue licences provincially , and now look where the fishery is
155	Mackerel gillnet usually lasts approximately 2 weeks at the max. I dont think it has any affect on the overall quota being caught. Prob less than 10%. Rest is caught by seiners
156	our catch per day has decreased over the past few years because more inactive licenses have started fishing and are putting pressure on us
157	I have a license but do not use it
158	for last number of years there is an abundance of mackerel but the majority are small . also the price paid for commercial mackerel is low so not profitable to fish . Early in summer Late June

nbr	comment
	and July the mackerak are larger and as the water increases in temperature they become almost all under sized
159	The fish seems smaller now.
160	Boats from X using automatic jiggers destroyed alot of mackerel last year & this year. This I feel is the reason why mackerel was very scarce this year.
161	I do not have a buyer in my area for mackerel so I only catch for halibut fishery and personal use
162	The macheral are so small not worth going fishing for
163	The recreational mackerel fishery needs to be regulated and enforced more closely. There is a large percentage of undersize mackerel coming ashore in both the recreational and commercial fisheries. Commercial fishers are killing 40/60 percent in order to land a commercial catch. There is also a major killing of small fish for the recreational fishery for stripper bait. There should be a recreational limit for mackerel and there should be a major enforcement push on handlining mackerel commercially.
164	ce devrait etre ceux qui ont des revenues moyens et qui en n'ont besoin pour vivre qui devrait etre priorise pour le peché,et aussi illiminer tout seiner pour protégé l'espece,et la ceux qui le pecherait ferait de melleurs débarquements car c'est une peche qui comporte ses difficultés,pas evidants de courir apres se poissons la, par experience!!
165	L'usine fournit les appats
166	Salut ,pour commencer le poisson est un être vivant qui donne la vie ,le stock est a la baisse, de ce que je peux constater ici aux Iles mais aussi quand tu donne aucune chance a une espèce de s'en sortir au bout de la ligne les résultats apparaissent, tout comme cette année des panier vide a bord, des récoltes de maquereaux insuffisante pour appâter les casiers de homards pour la pêche 2019 . Tout le monde est un peu coupable mais les pire sont ceux qui pêche avec des scènes peu importe ceux qu'il peuvent dire comme raison de continuer cette pêche ne justifie aucunement les répercutions que cela cause sur le stock de poisson et aussi pire la pêche du printemps avec filets est destructrice pour tout espèces que ce soit la plies ou le maquereaux ce n'est pas dur a comprendre comme je l'ai dit le poisson est une espèce vivante qui donne la vie et quand il est œuvé et capturé cela met un stop au cycle de la vie. Je trouve que certaine personne devraient porter leurs culotte et stopper cette pêche a la scène qui donne aucune chance a chaque petit pêcheur (pêche pour appât et se nourrir) dans le golf de pouvoir eux aussi profiter de la ressource. Les scénieurs capture le maquereaux même avant qu'il soit entré dans le golf. Et pour la pêche aux filets faut stopper cette pratique le maquereaux doit pouvoir se reproduire quand vien le temps. Merci beaucoup de la part X et qui croit encore qu'il n'est pas trop tard pour bien faire avant qu'il soit trop tard ou de dire on aurais donc du !
167	je crois qu'il devrais y avoir une limite de capture pour la peche sportive car on voir beaucour de pecheur sportif que entre a quai avec de bonne quantite qui se rammase a la poubelle ou qui sont vendu illegalement
168	Comme, je n'ai jamais fait la pêche, j'achetais les appâts dans une usine. Merci. X
169	Paye pas assez pour le péché et vendre
170	Il y a de plus en plus de phoque et de bar rayé.il mange boucoup de macqereau et de l'éperlan.
171	De ne plus délivré de nouveaux permis de pêche commerciale au maquereau, il en a déjà beaucoup ,il en a de nouveau qui détient déjà le permis arrive qui pêchait pas le maquereau auparavant et qui pêche maintenant! La première année à tourelle on était 2 qui commençait et aujourd'hui on est 5 et pour 2019 sûrement 6 ou 7 pêcheur de maquereau , le maquereau avec le

nbr	comment
	réchauffement de la planète l'eau devient chaude et le maquereau se dirige vers le côté nord de la Gaspésie pour trouver l'eau idéale pour lui ! Merci bonne journée!
172	Nous avons un problème d'acheteur à X, ce qui nous empêche de faire des débarquements..
173	La date d'ouverture a été mise beaucoup trop tard pour les filets maillants dans notre zone et cela a affecté de beaucoup nos captures.. puis par la suite.. août et septembre .. je ne sais pas si c'est la température de l'eau ou quoi ..mais lors de la pêche à la ligne à main, le poisson n'était pas là non plus.
174	Il serait important que nous gardions des quotas de maquereaux sur X,, avec le réchauffement cette espèce pourrait être avantagée comme il a été en Europe du Nord ces dernières années ,,Norvège, Islandemaintenant il y a des techniques de pêche à ligne automatique (Jigger) qui est très respectueuse pour l'environnement du milieu et rentable pour le pêcheur ,,technique peu coûteuse et accessible au pêcheur solitaire ou presqueainsi éviter les gros bâtiments (seigneur ou dragueur) qui sont moins regardants ...
175	What is this really for
176	dans notre région le commentaire des pêcheurs est qu'il y a moins de concentration de maquereau et qu'il est difficile de le pêcher commercialement. Certains pêcheurs vont faire une pêche pour l'appât personnel et vont faire une pêche selon l'abondance et sortir versus capture pour ne pas dépasser les coûts d'opération versus le coût de l'appât congelé
177	Le sondage est en ligne à partir d'une notification sur NOLS donc c'est un collègue de mon association de pêcheur qui l'a rempli avec moi car je ne pouvais accéder à mon NOLS sur mon iPhone et de plus NOLS est trop compliqué.
178	le maquereau commercial est de plus en plus rare
179	Je ne pêche pas le maquereau par contre, je l'achète à l'usine pour apâter mes casiers
180	On n'a pas pris de maquereau en 2018 parce que lorsque la pêche a ouvert le poisson était déjà passé je parle du maquereau de filets je n'ai pas pêché à la ligne en 2018.
181	Le maquereau est de plus en plus abondant dans notre secteur les trois dernières années.La taille de l'espèce varie.
182	I observed the retention of a lot of undersized fish. Either for use as bait for stripers or from individuals keeping every fish caught.
183	Worst year ever. Most were just barely legal size.[First year I even heard of a size limit.] No run in Halifax. Caught all in just 3 days at the very end of the N.S. run. Most were being caught in the head of X.