



2022 REPORT ON THE SALMON FISHERY IN GREENLAND

West Greenland Commission



Poster on the salmon fishing season including QR-codes
to the license application and the online reporting template

FEBRUARY 2023

MINISTRY OF FISHERIES AND HUNTING

¹ Paper revised 3 April 2023 to append an update on the salmon quota uptake in the 2022 fishery at Greenland.



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1. Introduction

According to *the Multi-Annual Regulatory Measure for fishing for salmon at West Greenland in 2022 (WGC(22)10)*; Denmark (in respect of the Faroe Islands and Greenland) agrees to, in a timely manner, inform NASCO and, as appropriate, ICES, of any significant changes in the monitoring, management, control and surveillance of the West Greenland Atlantic salmon fishery and to provide an annual report on the implementation of this measure and the outcome of the fishery.

This report outlines the outcome of the 2022 salmon fishery in Greenland, including East Greenland and the modifications that the Government of Greenland has made to the management and monitoring, control, and surveillance.

1.1 Subsistence Fishery

It is important to have in mind that the salmon fishery in Greenland is a subsistence/internal-use fishery and not by any means a commercial fishery. It is vital to Naalakkersuisut, the Government of Greenland, that all people have the right to provide for themselves and their families. This is an essential part of the life and culture in Greenland.

2. Implementation of the Regulatory Measure 2022

(1) Maintaining the management plan and updated the executive order.

(a) As according to the management plan the fishing season is as follows:

- Southwest: 1/8 – 30/9
- Northwest: 1/9 – 31/10
- East: 15/8 – 15/10



(b) Legal requirement in Executive Order to report every time the net is tended. Legal requirement to report 0-catch. An online reporting option was introduced in 2020 and has been used since then. Contact with the municipalities before and during the fishing season in relation to the importance of effective disclosure of salmon reports. Data collected in GFLKs² database for monitoring of quota-uptake. Continued radio campaign about reporting and text messages have again been sent to license holders.

(c) Since 2018 it has been a legal requirement to have a license to participate in the salmon fishery.

(d) Since 2018 it has been illegal to fish without a license.

(e) According to the 1996 Fisheries Act only professional fishermen are allowed to sell their catch. The executive order only allows them to sell their catch at local markets and to institutions.

(2) Since 2015, it has been a condition of the license to allow samplers to sample their catch.

(3) (a) Since 1998, there has been an export ban on salmon in Greenland. (b) Since 2015, it has been prohibited to land salmon to the fish processing factories.

(4) The TAC for West Greenland was set at 27 tonnes in 2022. According to the management plan the 27 tonnes were divided into quota for the two management areas in West Greenland.

(5) Since 2022, Greenland has agreed to close the fishery at West Greenland, when the registered catch has reached no more than 49% of the overall TAC. GFLK collects and registers catch data daily, and based on numerous variables, decides when to close the fishery in the different management areas. These include previous years' uptake, the weather, days of delay in reporting, and the oral reports from the local fisheries inspectors about the amount of salmon they see coming in (*see section 3 for elaboration*).

(6) GFLK collects and registers catch data daily. The quota uptake is published on GFLK's website every week. As mentioned above, there is continuous contact with the municipalities before and during the fishing season in relation to the importance of effective disclosure of salmon reports.

Greenland is reporting back to the West Greenland Commission with this report.

(7) If fishers do not report to GFLK, they will not be issued a license for the following year's fishery. This is automatically ensured via the GFLK database. It is a legal requirement to report 0-catch within 14 days of closing the fishery.

(8) Greenland has continued to use initiatives to increase reporting of license holders.

(a) To have the newest contact information, license holders are permitted to state their phone number and/or email when applying for a salmon license.

² GFLK: Greenland's Fisheries License Control Authority



(b). During the salmon season, radio campaigns were transmitted daily, reminding people to report their catches.

(c) License holders with the highest catches in the previous season, were sent a text message to remind them to report.

(d) To provide information about reporting during the fishing season, a national radio speak was aired daily to remind license holders to report. A poster was made and distributed to all municipalities with information about reporting. The poster was also hung on bus stops in Nuuk. When an area is closed, a press release is issued on the government's official website and social media. The press releases also contain information about the reporting deadline.

(e) To inform fishers and fishing communities of the fishery post season, an article was made for the national magazine for Fishers and Hunters which outlined the importance of reporting for managing the fishery as well as the provisional catches of the season.

(f) Phone interviews with non-reporters was conducted in February 2023, to review the reasons for non-reporting. Results from these interviews are mentioned in *section 2.3*.

(9) Greenland has not introduced any significant changes on monitoring, control or surveillance for the 2022 fishing season but has continued to fine tune the existing measures. This report outlines the implementation of the outcome of the fishery and the measures on monitoring, control, and surveillance to the West Greenland Commission.

Below an overview of the 2022 fishery is outlined.

3. The 2022 Fishing Season

In line with the *Multi-Annual Regulatory Measure*, the export ban continues to be in place and there were still no landings or sale of Atlantic salmon to fish processing factories allowed. An overview of opening and closure of the salmon fishery, the quota and quota uptake per management area and segment is summarized in table 1 and 2.

Table 1. Opening, closure, quota and quota uptake per management area and segment 2022. Source: GFLK								
Management Area	Opening	Closure pr. Segment		Quota per segment (tonnes)		Catch per segment (tonnes)		Total quota uptake (tonnes)
Northwest	1/9	Professional	19/10	Professional	7.56	Professional	8.62	10.11
		Recreational	31/10	Recreational	3.24	Recreational	1.49	
Southwest	1/8	Professional	22/8	Professional	11.34	Professional	11.23	17.59
		Recreational	11/9	Recreational	4.86	Recreational	6.36	



East	15/8	Professional	15/10	Professional	1.5	Professional	0.27	0.63
		Recreational	15/10	Recreational	1.5	Recreational	0.36	

Table 2. Total quota uptake West Greenland 2022.	
Management Area	Quota Uptake (tonnes)
Northwest	10.10
Southwest	17.60
Total quota uptake	27.70

2.1 Catch reports during the fishing season

In 2020, GFLK introduced an online reporting system through the public citizen website; Sullissivk.gl, to improve reporting access for fishermen. The solution has been enhanced during 2021 with personal login, to improve data quality. No further changes were made in 2022.

Figure 1 illustrates the quota uptake of salmon over time, after the opening of the fishery on August 1st.

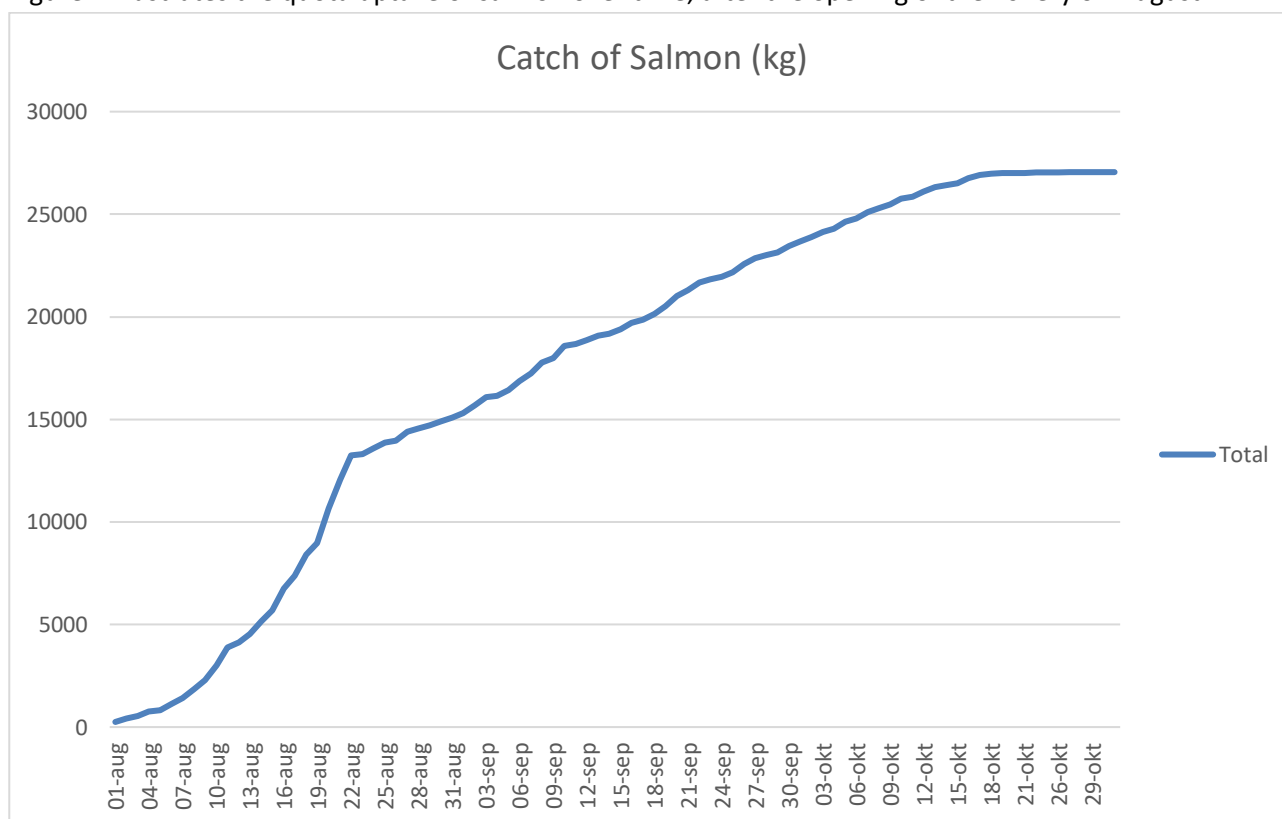


Figure 1. Catches of salmon (in kilograms) caught during the season. Dates from 2022. Source: GFLK



In 2021 catch reports were received at GFLK with a delay of approximately 12 days from the catch of the fish until the reports were registered at GFLK. In 2022, the delay in reporting has reduced to 11,5 days.³ While there is a slight decrease in the delay, there is still room for further improvement, therefore Greenland will continue to have focus on further improvements, especially communication with fishers.

2.2 Licenses and catch reports

In the following paragraph, a description of the reporting behavior of license holders and catch reports will be provided. To have an overview of the catch reports, the results in table 3 are divided into three groups; (1) catch reports received within season, (2) catch reports received between time of closure and last date of reporting, and (3) catch reports received after last date of reporting. The same grouping is used in table 4, which describes the results on the level of license holders rather than catch reports.

A total of 1.154 catch reports have been received by the GFLK (table 3), with most reports received during the fishing season (83%), which is higher than in 2021 (61%). This development is also applicable for license-holders, where the number of license-holders reporting >0 catch within the season have increased (table 4): In 2020 the percentage of license holders reporting within the season was 40%⁴. In 2021 it was 40%. In 2022 it was 58%, which is a positive improvement.

In 2022 there were 22% less license holders than in 2021, and 38% less catch reports.

7% of reports were received late, which is 1 percentage point less than last year. In 2021, Greenland reduced the deadline for reporting significantly. It seems that fishers are still not used to the reduced deadline. Press releases on closure of the salmon fishery in different management areas all contain a deadline for last day of reporting. As with every time we make changes to the management, it is going to take time for fishers to learn the changes and to comply with them.

The tables represent the 6 different sub-groups; professional and private in Northwest (1ABC), Southwest (1DEF) and East with the individual fishing seasons, all calculated respectively and summarized.

Table 3. Catch reports	Count	Percentage	1ABC Private	1ABC Professional	1DEF Private	1DEF Professional	East Private	East Professional
Overview								
<i>Catch reports received within the season</i>	971	84%	21%	34%	26%	18%	1%	0%
<i>Catch reports received between time of closure and last date of reporting</i>	93	8%	10%	18%	57%	13%	1%	1%

³ Outliers were sorted out since they skewed the results. With outliers the number is 16 days. Reports received in 2023 were deemed to distort the overall picture, since the number is meant to help decide when to close the fishery during the season.

⁴ Here both >0 catch and 0-catch were calculated together. The number of license holders reporting >0 catch within the season must therefore be lower than 40%.



<i>Catch reports received after last date of reporting</i>	78	7%	9%	14%	60%	16%	1%	0%
<i>Total number of catch reports received (incl. 0-catch reports)</i>	1154 ⁵	100%	19%	31%	31%	17%	2%	1%
Catch reports with > 0 catches								
<i>Catch reports received within the season</i>	841	93%	15%	37%	26%	19%	2%	1%
<i>Catch reports received between time of closure and last date of reporting</i>	37	4%	0%	5%	78%	16%	0%	0%
<i>Catch reports received after last date of reporting</i>	18	2%	0%	0%	78%	22%	0%	0%
<i>Total number of catch reports</i>	900	78% ¹	11% ¹	27% ¹	23% ¹	15% ¹	2% ¹	1% ¹
Catch reports with 0-catches								
<i>Catch reports received within the season</i>	130	53%	54%	13%	24%	7%	2%	1%
<i>Catch reports received between time of closure and last date of reporting</i>	56	23%	16%	27%	45%	11%	2%	0%
<i>Catch reports received after last date of reporting</i>	60	24%	12%	18%	57%	12%	2%	0%
<i>Total of number of 0-catch reports</i>	246	21% ¹	7% ¹	4% ¹	8% ¹	2% ¹	0% ¹	0% ¹

¹ percent of the total number of catch reports of 1154.

Table 4. Overview of licenses in the salmon fishery in 2022	Count	Percentage	1ABC Private	1ABC Professional	1DEF Private	1DEF Professional	East Private	East Professional
Number of licenses issued in total								
- Professional	291	38%		62%		34%		4%
- Private	466	62%	32%		65%		3%	
- Total	757	100%	19%	24%	40%	13%	2%	1%

⁵ This number also includes reports received before the beginning of the season, which do not fall under any of these categories. Some reports received in 2023 are also included here while not being in any of the above groups.



Overview:								
<i>Number of license holders reporting in total</i>	473	62%	19%	23%	40%	15%	2%	0%
<i>License holders not reporting</i>	284	38%	21%	24%	39%	9%	2%	3%
<i>License holders only reporting 0-catches</i>	201	27%	25%	19%	42%	12%	2%	0%
<i>License holders reporting catches > 0 kg</i>	272	36%	15%	26%	39%	18%	1%	0%
License holders reporting within season ²								
<i>Reports with catch > 0 kg</i>	275	58%	16%	28%	37%	18%	0%	1%
<i>Reports with 0-catch</i>	86	18%	40%	13%	34%	10%	2%	1%
License holders reporting between time of closure and last date of reporting ²								
<i>Reports with catch > 0 kg</i>	22	5%	0%	9%	68%	23%	0%	0%
<i>Reports with 0-catch</i>	54	12%	17%	28%	43%	11%	2%	0%
License holders reporting after last date of reporting ²								
<i>Reports with catch > 0 kg</i>	8	2%	0%	0%	88%	13%	0%	0%
<i>Reports with 0-catch</i>	61	13%	11%	18%	56%	13%	2%	0%

² Percentage is compared to total number of reporting license holders (473). Please note, that a license holder can send multiple catch reports. The same license holder can therefore be included in multiple buckets.

2.3 Decrease in reporting

Overall, the reporting has not been satisfying in 2022 with a reporting percentage of 62 %, which is a decrease from 2021, where reporting was 70% (see also table 5). Recreational license holders in the Southwest of Greenland have the highest percentage of non-reporters between the different segments. Therefore, there will be increased focus on that management area in 2023.

Phone interviews with non-reporters were conducted by the Ministry in February 2023. License holders were asked why they did not report. No statistics were made based on the interviews, but the majority of the interviews revealed that license holders did not report because they did not catch anything, and that they had forgotten. Few had reported to the municipality, but it had not been registered in the database. Few had trouble logging in to report online or using the online reporting system. The delay in reporting is still quite high, which makes it even more difficult to determine when to close the fishery.

154 catch reports were reported late, which is expected because the deadline has been changed to 14 days after fishery closure of the individual management area. However, the increase of license holders who did



not report is not satisfactory. This might be impacted by the number of new license holders. In the 2022 season, 43% of license holders did not have a license the previous year. This means that almost half of license-holders need to understand a reporting system, that is different from other fisheries in Greenland. As according to the regulation, non-reporters will not receive a license for 2023.

3. Evaluation of regulatory measure (5)

In the first year of this regulatory measure, Denmark (in respect of the Faroe Islands and Greenland) agrees to close the fishery at West Greenland when the registered catch has reached no more than 49% of the overall TAC.

The overall catch in the 2022 season is 27,7 tonnes in West Greenland, which is 2,6 % above the overall TAC of 27 tonnes. This is much closer to the TAC than previous years, and it is therefore relevant to explain how this new closure mechanism has affected the overall catch.

Greenland was able to choose how they wanted to implement the closure mechanism in the different segments. The 49% percent was therefore not the only parameter affecting the decision of when to close the fishery. The segment for professional fishers in Southwest was followed closely and the fishery was closed at 40 % uptake.

Another factor affecting the fishery in the 2022 season was bad weather, which meant fewer possible fishing days, especially for recreational fishers. GFLK also received daily oral reports from their local fisheries inspectors. They were, on occasion, able to report large amounts of salmon at the local market, while GFLK did not receive any reports on the catches, which meant a delay in reporting time. This also affected the decision of when to close the fishery. The local inspectors also contributed with their assessment of the status of the fishery. Other than that, GFLK calculated delay in reporting for every segment during the fishing season, which also affects when the fishery is closed. Longer delays result in earlier closure. Delay in reporting from the previous season also helped to calculate when the fishery should have been closed last year to stay within the quota. The number of days between issuing the press release concerning the closure of the fishery, and the actual date of closure, are also important. Here weather, weekends and the delay in reporting also contributes. In general, the notification time is 2-3 days.

4. Summary of 2022 season

Table 5 shows the uptake and reporting percentage. It shows a decrease in reporting and a fluctuation in quota uptake. The new regulation mechanism on when to close the fishery has seemingly had a positive impact on the quota uptake, but other factors can also have impacted the level of uptake, such as the bad weather. The number of license holders reporting within the season have increased for the 2022 season, which may also have contributed to the timely closure of the fishery.

Table 5. Summary of the fishery in West Greenland 2019-2022				
Year	2019	2020	2021	2022
Reporting percentage	81.6%	81.4%	69.5%	62%
Quota uptake (tonnes)	28.8	30.7	39.97	27.70



NASCO
 West Greenland Commission

Update on salmon quota uptake 2022, Greenland

Since Greenland submitted their Annual Status Report on the salmon season in 2022, there has been changes to the uptake.

The new numbers can be seen in the tables below. New numbers are marked with red.

Table 1. Opening, closure, quota and quota uptake per management area and segment 2022. Source: GFLK								
Management Area	Opening	Closure pr. Segment		Quota per segment (tonnes)		Catch per segment (tonnes)		Total quota uptake (tonnes)
Northwest	1/9	Professional	19/10	Professional	7.56	Professional	8.49	10.01
		Recreational	31/10	Recreational	3.24	Recreational	1.59	
Southwest	1/8	Professional	22/8	Professional	11.34	Professional	11.88	18.80
		Recreational	11/9	Recreational	4.86	Recreational	6.91	
Kapisillit river	1/8	Recreational		Recreational		Recreational	0.052	0.052
East	15/8	Professional	15/10	Professional	1.5	Professional	0.282	0.86
		Recreational	15/10	Recreational	1.5	Recreational	0.58	

Table 2. Total quota uptake West Greenland 2022.	
Management Area	Quota Uptake (tonnes)
Northwest	10.01
Southwest	18.80
Total quota uptake	28.93¹

¹ Kapisillit included.

<i>Table 3. Catch reports</i>	Count	Percentage
Overview		
<i>Catch reports received within the season</i>	1047	83%
<i>Catch reports received between time of closure and last date of reporting</i>	101	8%
<i>Catch reports received after last date of reporting</i>	92	7%
<i>Total number of catch reports received (incl. 0-catch reports)</i>	1267 ²	100%

The reason for the increased uptake is two-fold:

In relation to conducting interviews with non-reporters, GFLK received new reports. These are reported as late.

Another reason is that we unfortunately had a flaw in the online reporting system, which resulted in at least 84 reports not being received during the season and after last day of reporting. These reports are now accounted for. Many of these reports were therefore sent to GFLK within the season (76 reports) but was not accounted for until recently.

These reports does contribute to the increase in quota uptake, but also in increasing the reporting percentage.

<i>Table 4. Overview of licenses in the salmon fishery in 2022</i>	Count	Percentage
Number of licenses issued in total		
- <i>Professional</i>	291	38%
- <i>Private</i>	466	62%
- <i>Total</i>	757	100%
Overview:		
<i>Number of license holders reporting in total</i>	513	68%
<i>License holders not reporting</i>	244	32%
<i>License holders only reporting 0-catches</i>	191	25%
<i>License holders reporting catches > 0 kg</i>	322	43%

Greenland considers these numbers to be the final quota uptake for the salmon season in 2022.

² This number also includes reports received before the beginning of the season, which do not fall under any of these categories. Some reports received in 2023 are also included here while not being in any of the above groups.