

## SANA MIGRATORY FISH COMMITTEE

### ANALYSIS OF SALMON AND SEA TROUT CATCHES TO DETERMINE THE TRUE IMPACT OF NETTING

**This is a provisional report, not just because the figures are an early assessment by the Marine Directorate of the Scottish Government for 2023 catches. We do not yet have the monthly catch data. However we do, at last, have the 2022 data for net catches in the North of England.**

Provisional figures for Scottish rod catches of salmon and sea trout in 2023 show a substantial decrease of 24 % from the corresponding position in 2022. Speculation, based only on personal observation, suggests that less effort by anglers may account for this significant drop. However, net catches dropped by an almighty 54 %. That could point in the other direction as regards underlying stocks of fish. However, it may be that costs of net fishing have reduced effort also by those involved. (This has been confirmed for East Coast net and coble operations.) The total wild salmon “all methods” catch was 33,023 (2022 was 44,162). The 2023 sea trout total (finnock excluded) catch was little changed at 16,003 (16,571 in 2022). The sea trout rod catch component increased a little.

Each year’s official catch statistics are examined by the Committee, so that they and SANA’s members at large may be better informed. There are fewer netting stations in operation than hitherto and the moratorium on netting by fixed engines from 2016 has been extended indefinitely. Despite the known pressure on salmon stocks, commercial net fishing continued.

As in the 2022 catch statistics, compiled by the Marine Directorate, fish being released by nets in 2023 was a feature. Most releases were from fixed engine nets (chiefly haaf nets in the Solway), as opposed to net and coble. Net release rates were 53% for salmon (54% in 2022) and 53% for sea trout (19% in 2022). Equivalent rates for rod-caught salmon were 96% and 92% for sea trout.

For the early part of the year, up to and including June, the release rate for nets was xx%. In the same period of 2022, the rods’ release rate was 97%.

In 2023, 31% of wild salmon killed in Scotland were caught by nets (25% in 2022) – despite the remarkable feature of a high level of returned salmon by haaf netters. However, we note the low level for their sea trout catches. Targeting of effort on sea trout has been seen before now. While we have viewed net fishing as an important pressure on fish stocks, especially sea trout and spring salmon, it is not solely a Scottish problem. However, there is good news about an improving situation in respect of killing of sea trout of Scottish origin by nets in the North East of England. The details follow below.

Following lobbying, chiefly through SANA’s participation in NASCO meetings, the North of England drift net fishery closed after the 2018 season. However, the North East of England fixed engines continued to operate from 2019, albeit with a requirement to return salmon. However, their wholesale slaughter of many thousands of Scottish sea trout remained a huge concern. Previous genetics research has shown that English nets impact on stocks in Scotland, especially sea trout. The numbers and the high average size of the sea trout indicate their killing of Scotland’s broodstock on a grand scale. A proposed extension of the net season in 2020 was withdrawn by the Environment Agency, following representation by many bodies, including SANA.

Because of the Scottish ban on coastal nets from 2016, radical changes in the proportion of fish killed by nets could be expected. Indeed, that happened – but not initially to the extent that net catches were an insignificant proportion of those fish that are retained. In the case of the North Esk, in-river nets remained a significant pressure on stocks but did not operate from 2019. That made a big difference.

The substantial point is that net fisheries, except those undertaken for research purposes and those that are now obliged to return fish (notably haaf nets), are entirely lethal – their objective is to produce dead fish for sale. Rod fishers are

prevented, by law, from killing early spring fish. Under Scottish Government conservation measures, the same obligation holds all season for category 3 rivers and there are also recommendations for categories 2 and 1. Selling rod caught salmon and sea trout is illegal.

The analysis looks at the respective numbers of wild fish killed to provide food. The net catch had become a more significant pressure on stocks in past years, especially for fragile spring stocks of early running fish – which for many anglers means from January to June. Because of the ban on coastal netting in 2016, there was considerable further easing of its impact.

Looking at relative netting impact, the previous contrast between the early season and late season had disappeared. In 2022, nets appeared to present less of a pressure on stocks, accounting for 42% of spring salmon killed to end June (cf. 25% in 2021.) Nets accounted for 21% of fish killed after June, half of the figure in the early part of the season.

In the pattern of Scottish sea trout net catches in 2023, a notable change was the much lower proportion attributed to net and coble operations.

Catch statistics from England and Wales are not up-to-date. The 2022 catch returns were published in December 2023. Again, the Environment Agency published them with a warning notice: “The data should not be accepted as a definitive record of the total numbers of fish landed.”

Declared North East of England net catches in 2022 for salmon were 556. Previous years Salmon and Grilse: - 55 in 2021, 288 in 2020, 129 in 2019, 9,433 in 2018 and 9,909 in 2017. Sea Trout catches rose considerably to 8,013. Previous years: 5,507 in 2021, 10,902 in 2020, 13,673 in 2019, 22,508 in 2018, 35,148 in 2017, 38,863 in 2016 and 60,696 in 2015. The sea trout average weight was reported as 1.84 kg (i.e. over 4 lbs) for 2021.

This is a mixed stock fishery exploiting fish of unknown river origin, many of which are thought to be from river stocks in Scotland\*. SANA prepared two submissions on this topic as part of a consultation on the future of this licensed fishery. Before the curtailment of these fisheries, announced in 2018, the number of licensed nets was to have been reduced but the catch figures had suggested that the remaining nets became more efficient.

The good news is that the North East of England (all in Yorkshire) salmon net catches, if true, are now an insignificant pressure on Scottish stocks. The sea trout situation has been improving also. However, a real and continuing drop in catches seems to have reversed. The scale of these catches, by methods banned on Scotland’s east coast, still represents a notable pressure on Scottish sea trout stocks.

Craig Campbell, 15 March 2024

*Sources: Scottish Government Marine Directorate and Environment Agency The data used in the tables below are Crown copyright, used with the permission of Marine Scotland Science. Scottish Government Marine Directorate is not responsible for interpretation of data by third parties.*

*\*footnote: The first analysis of genotyping of catch samples was completed in respect of salmon: Genetic Investigation of the North East English Net Fisheries by John Gilbey, Lee Stradmeyer, Eef Cauwelier, Stuart Middlemas (Published 2012) Marine Scotland Science, Freshwater Laboratory, Faskally, Pitlochry, PH16 5LB. It says: “Assignment to region suggests that all NE English fisheries utilise a mixed stock resource, with between 40 – 80 % of the captures being fish of Scottish origin, depending on the fishery. Drift nets have the highest proportion of Scottish captures, and T and J nets the lowest.”*

**NUMBERS OF GAME FISH KILLED IN SCOTLAND - 2014 TO 2023**

	<b>Rod and Line</b>	<b>Nets</b>	<b>Total</b>	<b>Nets as % of total</b>
Whole season salmon and grilse catch, retained in 2014	8,036 – after 82% release rate	17,778	25,814	69%
Whole season salmon and grilse catch, retained in 2015	8,996 – after 84% release rate	13,583 - 76% caught by fixed engines	22,579	60%
Whole season salmon and grilse catch, retained in 2016	5,597 – after 90% release rate	2,846	8,443	34%
Whole season salmon and grilse catch, retained in 2017	5,187 – after 90% release rate	2,193	7,380	30%
Whole season salmon and grilse catch, retained in 2018	2,475 – after 93% release rate	3,860	6,335	61%
Whole season salmon and grilse catch, retained in 2019	3,786 – after 92% release rate	629	4,415	14%
Whole season salmon and grilse catch, retained in 2020	3,018 – after 93% release rate	780	3,798	21%
Whole season salmon and grilse catch, retained in 2021	1,619– after 95% release rate	576	2,195	26%
Whole season salmon and grilse catch, retained in 2022	1,460 – after 97% release rate	475 – after 54% release rate	1,935	25%
<b>Whole season salmon and grilse catch, retained in 2023</b>	<b>1,188 – after 96% release rate</b>	<b>536 – after 54% release rate</b>	<b>1,724</b>	<b>31%</b>

	<b>Rod and Line</b>	<b>Nets</b>	<b>Total</b>	<b>Nets % of total</b>
Jan-June salmon and grilse catch, retained in 2012	3,024 – after 92% release rate	3,356 – 78% in fixed engines	6,380	53%
Jan-June salmon and grilse catch, retained in 2013	2,287 – after 87% release rate	4,457 – 85% in fixed engines	6,744	66%
Jan-June salmon and grilse catch, retained in 2014	1,265 – after 89% release rate	4,293 – 82% in fixed engines	5,558	77%
Jan-June salmon and grilse catch, retained in 2015	1,370 – after 91% release rate	2,706 – 86% in fixed engines	4,076	66%
Jan-June salmon and grilse catch, retained in 2016	1,084 – after 95% release rate	1,166 –90% taken at N Esk	2,250	52%
Jan-June salmon and grilse catch, retained in 2017	1,050 – after 93% release rate	921 –80% taken at N Esk	1,971	47%
Jan-June salmon and grilse catch, retained in 2018	270 – after 97% release rate	990 –87% taken at N Esk	1,260	79%
Jan-June salmon and grilse catch, retained in 2019	616 – after 95% release rate	155	771	20%
Jan-June salmon and grilse catch, retained in 2020	311 – after 95% release rate	188	499	38%
Jan-June salmon and grilse catch, retained in 2021	276 – after 97% release rate	93 - after 67% release rate	369	25%
Jan-June salmon and grilse catch, retained in 2022	205 – after 98% release rate	147 – after 47% release rate	352	42%
<b>Jan-June salmon and grilse catch, retained in 2023</b>				

	<b>Rod and Line</b>	<b>Nets</b>	<b>Total</b>	<b>Nets as % of total</b>
Post June Salmon and Grilse catch retained in 2014	6,771	13,485	20,256	67%
Post June Salmon and Grilse catch retained in 2015	7,626	10,877	18,503	59%
Post June Salmon and Grilse catch retained in 2016	4,513	1,680	6,193	27%
Post June Salmon and Grilse catch retained in 2017	4,137	1,272	5,409	24%
Post June Salmon and Grilse catch retained in 2018	2,205	2,870	5,075	57%
Post June Salmon and Grilse catch retained in 2019	3170	474	3,644	13%
Post June Salmon and Grilse catch retained in 2020	2,707	592	3,299	18%
Post June Salmon and Grilse catch retained in 2021	1,343	483	1,826	26%
Post June Salmon and Grilse catch retained in 2022	1,256	328	1,584	21%
<b>Post June Salmon and Grilse catch retained in 2023</b>				

	<b>Rod and Line</b>	<b>Nets</b>	<b>Total</b>	<b>Nets as % of total</b>
Whole season sea trout catch, retained in 2014	4,308 – after 80% release rate	6,108 - 61% taken by net and coble	10,416	59%
Whole season sea trout catch, retained in 2015	4,503– after 79% release rate	4,281 - 64% taken by net and coble	8,784	49%
Whole season sea trout catch, retained in 2016	3,499 – after 81% release rate	2,397 - 66% taken by net and coble; 53% at N Esk	5,896	41%
Whole season sea trout catch, retained in 2017	2,983 – after 84% release rate	2,931 - 75% taken by net and coble; 61% at N Esk	5,914	50%
Whole season sea trout catch, retained in 2018	1,424 – after 90% release rate	1,680 - 81% taken by net and coble; 57% at N Esk	3,104	54%
Whole season sea trout catch, retained in 2019	2,159 – after 87% release rate	772 - 73% taken by net and coble	2,931	26%
Whole season sea trout catch, retained in 2020	1,565 – after 88% release rate	683 - 83% taken by net and coble	2,248	30%
Whole season sea trout catch, retained in 2021	1,600 – after 87% release rate	914 - 99% taken by net and coble	2,514	36%
Whole season sea trout catch, retained in 2022	1,368 – after 91% release rate	1,151 - 78% taken by net and coble	2,519	46%
<b>Whole season sea trout catch, retained in 2023</b>	<b>1,172 – after 91% release rate</b>	<b>1,074 - 46% taken by net and coble</b>	<b>2,246</b>	<b>48%</b>