

Salmon and sea trout fishing



Key message

The total reported rod catch of wild salmon has been declining since the highest recorded level in 2010. Reported catch and effort for salmon net fisheries have also declined.

Catches of sea trout by rod and net fisheries have also declined and are at the lowest levels since 1952.



Example of fixed engine fishery for salmon and sea trout undertaken in Scotland.

What, why and where?

Atlantic salmon are one of Scotland's most iconic species, forming an important part of river ecosystems and, through salmon fisheries, contributing to the rural economy. They live in fresh water as juveniles before migrating to sea to undertake migrations to their oceanic feeding grounds in the North Atlantic. As adults they return to the rivers in which they grew up where they then spawn and begin the next generation. Scottish Government has collected, and published, the catches of salmon and sea trout reported by fisheries each year since 1952 (Figure 1). Fisheries fall into one of three broad categories: fixed engine (passive nets which the fish must actively swim into), net and coble (the



(a) net and coble



(b) rod fishing

Figure 1:

Examples of fisheries for salmon and sea trout undertaken in Scotland.

use of a sweep net to surround the fish and draw them to the bank or shore) and rod fisheries. Catch statistics (Figures 2 to 5) are published as doi datasets (Scottish Government, 2019a).

Salmon and sea trout catches by all methods have declined between 2014 and 2018. This is the result of reductions in stocks and restrictions/prohibitions on salmon fishing activities to aid stock recovery. In particular, coastal salmon netting has been prohibited since 2016 and the netted catch of salmon from the sea is zero. Additionally, other fisheries may only take salmon where river stocks have been shown to be in good conservation status.

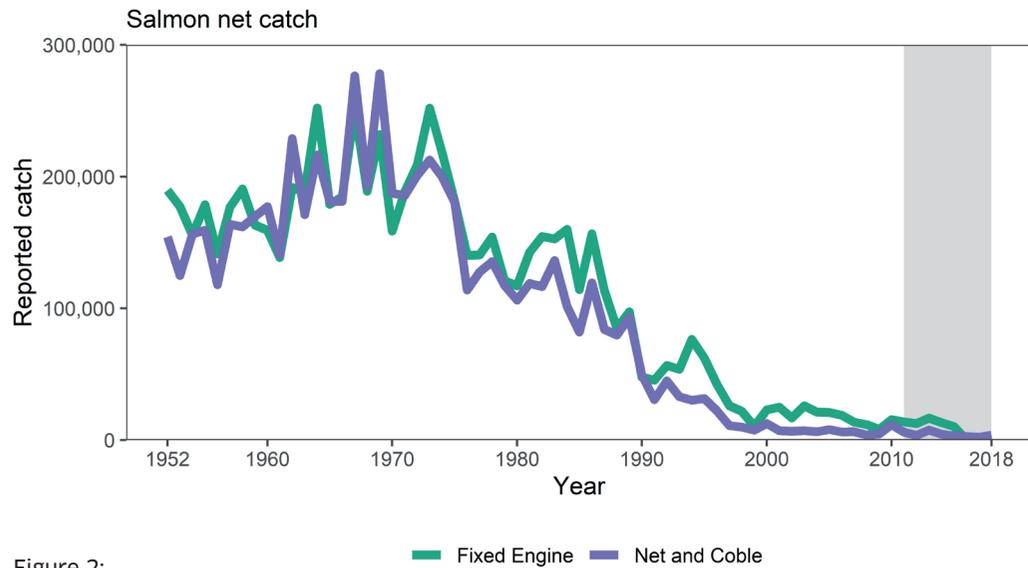


Figure 2: Reported catches of salmon from the fixed engine and net and coble fisheries in Scotland 1952 to 2018. Source: Marine Scotland

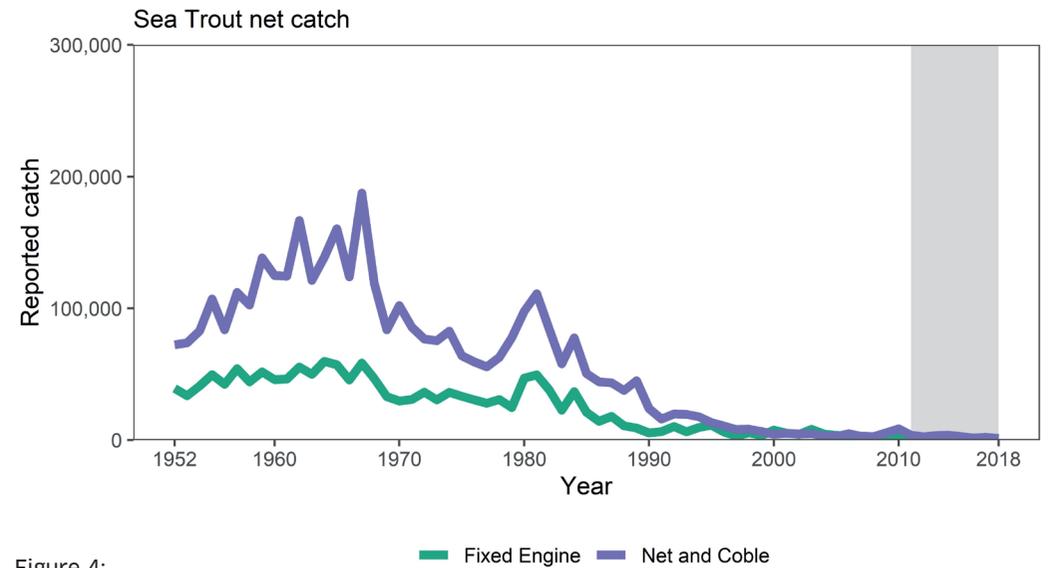


Figure 4: Reported catches of sea trout from the fixed engine and net and coble fisheries in Scotland 1952 to 2018. Source: Marine Scotland

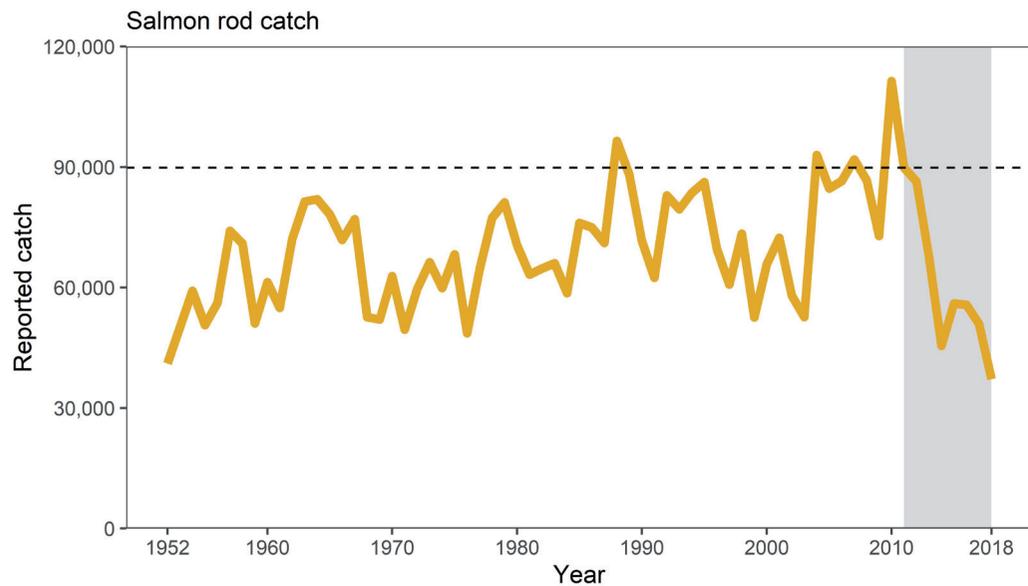


Figure 3: Reported catches of salmon from rod fisheries in Scotland 1952 to 2018. Dotted line represents the 2011 catch for reference. Source: Marine Scotland

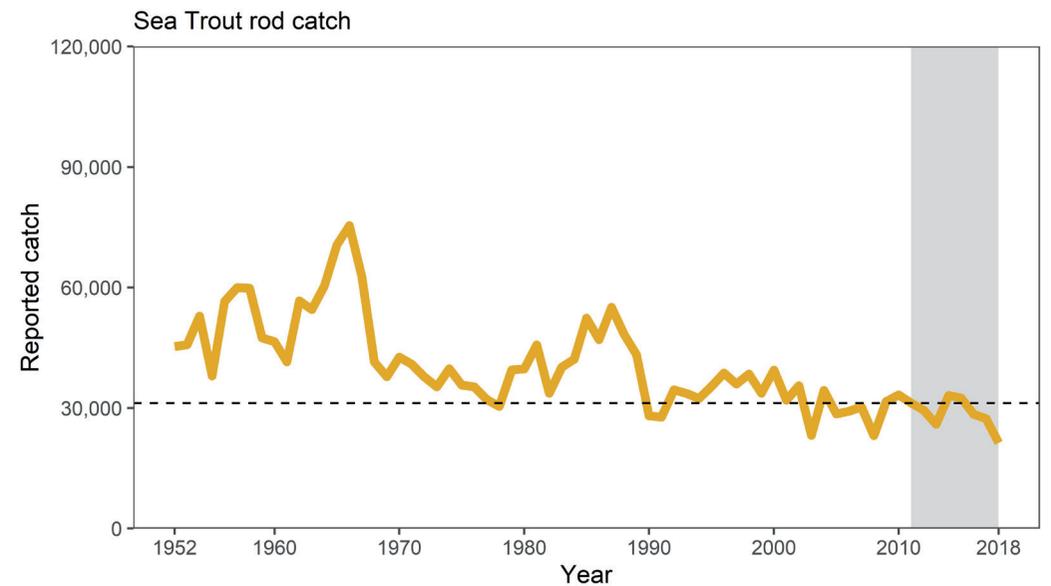


Figure 5: Reported catches of sea trout from rod fisheries in Scotland 1952 to 2018. Dotted line represents the 2011 catch for reference. Source: Marine Scotland

Contribution to the economy

There is no information on the economic contribution of salmon and sea trout fishing. Figures for Gross Value Added (GVA) and numbers employed cannot be obtained from the Scottish Annual Business Survey (SABS). It is also not possible to estimate their economic contribution from other sources, like The Scottish Marine Recreation & Tourism Survey 2015 (Scottish Government, 2016), as while the value of sea angling trips is estimated, the number of trips isn't.

Employment tends to be seasonal, particularly in the net fisheries. The numbers fluctuate, with July being the month with the most employment in the net fisheries.

While the contribution to the economy from salmon and sea trout fishing is not collected in the SABS, salmon and sea trout fishing statistics are reported by catch method. Table 1 shows the weight of catch in 2018 and the change between 2014 and 2018 by catch method. The catches shown in Table 1 include all fish species reported in the statistics (wild salmon, wild grilse, sea trout, finnock, farmed salmon, farmed grilse).

Fixed engine catches have reduced to zero in all areas except Solway where the 2018 catch from the haaf net fishery was 905 kg.

Net and coble catches were reported in the Forth and Tay, North East and Solway SMRs. Only in the North East did the catches increase from 2014 to 2018, although from 2019 onwards the net and coble fishery on the North Esk (the main contributor to the North East SMRs catches) will no longer be operated.

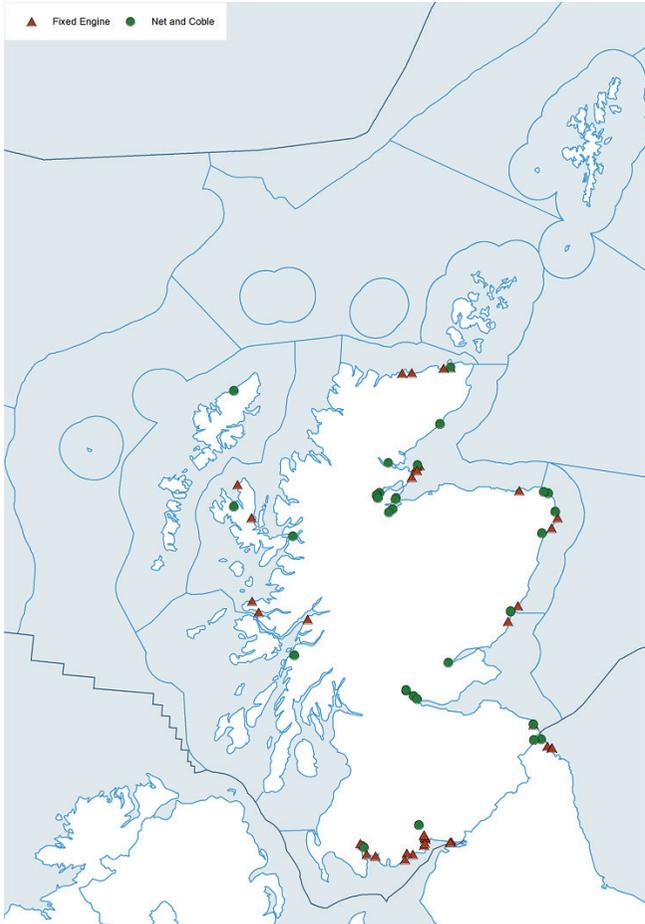


Figure 6: Net fisheries (fixed engine and net & coble) reporting catches in 2011 to 2018. Source: Marine Scotland.

Table 1:

Salmon and sea trout fishing, by method and region, and changes 2014 to 2018.

Method	Catch weight (kg) 2018	Change 2014 to 2018		
		kg	%	Trend
SMR				
Fixed engine	905	-42,613	-98%	↓
Argyll	0	-816	-100%	↓
Clyde	0	0		↔
Forth and Tay	0	-18,044	-100%	↓
Moray Firth	0	-6,089	-100%	↓
North Coast	0	-12,265	-100%	↓
North East	0	-1,572	-100%	↓
Outer Hebrides	0	0		↔
Solway	905	-3,797	-81%	↓
West Highlands	0	-30	-100%	↓
Net and Coble	13,436	-9,646	-42%	↓
Argyll	0	-32	-100%	↓
Clyde	0	0		↔
Forth and Tay	2,531	-10,396	-80%	↓
Moray Firth	0	-86	-100%	↓
North Coast	0	0		↔
North East	10,765	917	9%	↑
Outer Hebrides	0	-32	-100%	↓
Solway	140	-15	-10%	↓
West Highlands	0	-2	-100%	↓
Rod and Line	146,681	-49,796	-25%	↓
Argyll	3,387	-792	-19%	↓
Clyde	6,807	-2,224	-25%	↓
Forth and Tay	46,642	-21,724	-32%	↓
Moray Firth	47,482	-5,832	-11%	↓
North Coast	8,944	-4,456	-33%	↓
North East	20,212	-8,217	-29%	↓
Outer Hebrides	3,591	-3,895	-52%	↓
Solway	5,143	-547	-10%	↓
West Highlands	4,473	-2,111	-32%	↓

Source: Marine Scotland. Salmon and Sea Trout fishery statistics: 2018 Season - reported catch and effort by method. DOI: 10.4789/12206-1. Salmon and Sea Trout Catches available from <https://scotland.shinyapps.io/sg-salmon-sea-trout-catch/> Note: Although there are rod and line catches in the Shetland SMR these has been excluded from the above table due to data quality concerns.

The Scottish Marine Recreation & Tourism Survey 2015 (Scottish Government, 2016) gathered information on sea angling from the shore and sea angling from a private or chartered boat. The analysis suggests a median spend of around £60 per day during trips to the coast involving angling from the shore and a median spend of around £100 per day during trips to the coast involving angling from a boat.

Looking at annual spend, again the range of spending was high and so the median spend figure was taken to provide an overall value. For trips to the coast involving angling from the shore the median annual figure for spending was around £300 and for trips to the coast involving angling from a boat was around £660

Examples of socio-economic effects

- Tourism (for rod fisheries).
- Local employment.
- Iconic food product of Scotland (net fisheries only, rods not permitted to sell fish).
- Possible competition with other amenity users.

Pressures on the environment

An OSPAR agreed list of marine pressures is used to help assessments of human activities in the marine environment. The [marine pressure list](#) has been adapted for use in Scotland via work on the [Feature Activity Sensitivity Tool \(FeAST\)](#).

Salmon and sea trout fishing activities can be associated with 12 marine pressures – please read the pressure descriptions and benchmarks for further detail.

Forward look

The sector's future very much depends on the status of stocks together with the general economic situation. With a range-wide decline in salmon numbers and concerns over the conservation status of stocks throughout Scotland it is unlikely that the prohibition on coastal netting will be lifted in the near future. The decline in the estuarine nets also looks set to continue with the largest active station being bought out by wild fisheries interests in 2019. The future for rod fisheries will also be dependent on salmon and trout numbers coming back to rivers. Marine Scotland will continue to monitor the status of both stocks and fisheries.

Economic trend assessment

The trend is based on the change in the combined catch weight, in kg, of salmon and sea trout by SMR and for Scotland as a whole. A change of less than 5% is shown as stable (↔). The rod and line catch weight for Shetland SMR has been excluded from this analysis due to data quality concerns, this does not affect the overall trend.

Lowest available geography is salmon fishery

districts which have been aggregated into Scottish Marine Regions.

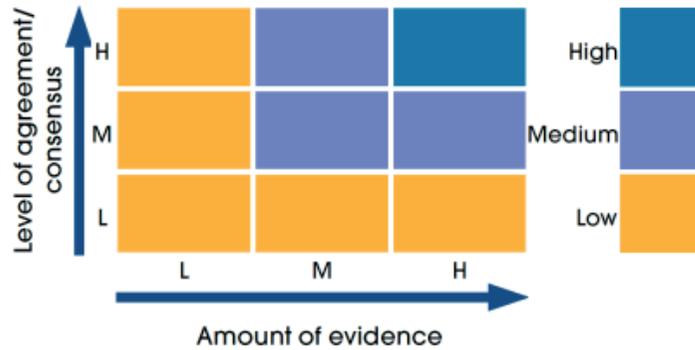
Confidence is **. Based on published statistics but there are concerns about data quality in Shetland SMR which has been excluded from trends.

Method	Region	Trend
Total catch weight of salmon and sea trout		
	Argyll	
	Clyde	
	Forth and Tay	
	Moray Firth	
	North Coast	
	North East	
	Outer Hebrides	
	Solway	
	West Highlands	
	Scotland	

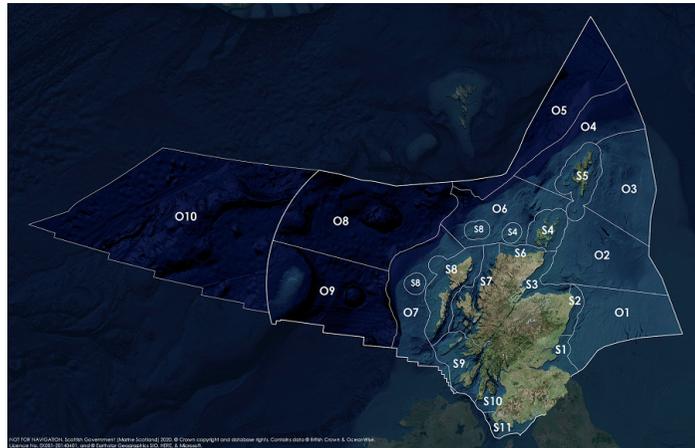
Status and trend assessment legend

Status assessment (for Clean and safe, Healthy and biologically diverse assessments)		Trend assessment (for Clean and safe, Healthy and biologically diverse and Productive assessments)	
	Many concerns		No / little change
	Some concerns		Increasing
	Few or no concerns		Decreasing
	Few or no concerns, but some local concerns		No trend discernible
	Few or no concerns, but many local concerns		All trends
	Some concerns, but many local concerns	Confidence assessment	
	Lack of evidence / robust assessment criteria		
	Lack of regional evidence / robust assessment criteria, but no or few concerns for some local areas		Low
	Lack of regional evidence / robust assessment criteria, but some concerns for some local areas		Medium
	Lack of regional evidence / robust assessment criteria, but many concerns for some local areas		High

Overall confidence



Assessment regions

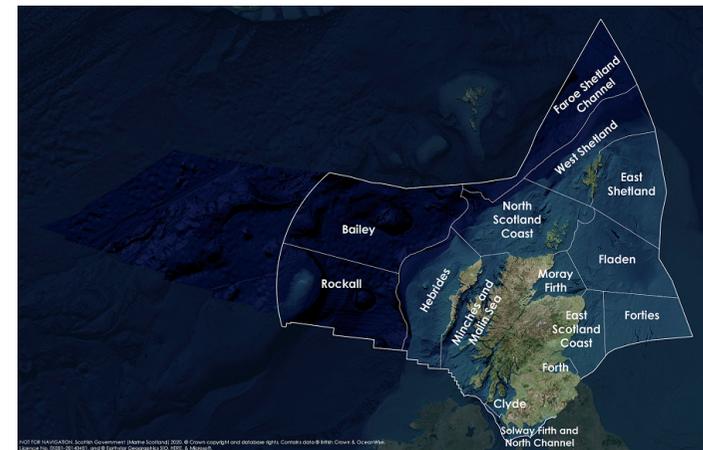


The Scottish Marine Regions (SMRs; S1 - S11) and the Scottish Offshore Marine Regions (OMRs, O1 - O10)

Key: S1, Forth and Tay; S2, North East; S3, Moray Firth; S4 Orkney Islands, S5, Shetland Isles; S6, North Coast; S7, West Highlands; S8, Outer Hebrides; S9, Argyll; S10, Clyde; S11, Solway; O1, Long Forties, O2, Fladen and Moray Firth Offshore; O3, East Shetland Shelf; O4, North and West Shetland Shelf; O5, Faroe-Shetland Channel; O6, North Scotland Shelf; O7, Hebrides Shelf; O8, Bailey; O9, Rockall; O10, Hatton.



Biogeographic, Charting Progress 2 (CP2) Regions. These have been used as the assessment areas for hazardous substances.



Scottish Sea Areas as used in Scotland's Marine Atlas 2011. These are sub divisions of the biogeographic, or Charting Progress 2 (CP2), Regions.