



FISHERIES STATISTICS 1991



Salmonid and Freshwater Fisheries Statistics for England and Wales
(Declared catches of salmon and migratory trout, by rod and by commercial instrument and inclusive of the available catch data for eels and freshwater fish).

Salmonid and Freshwater Fisheries Statistics for England and Wales

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ENVIRONMENT AGENCY

Published by:

National Rivers Authority

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Waterside Drive
Aztec West
Almondsbury
Bristol
BS12 4UD

Tel: 0454 624400
Fax: 0454 624409

ISBN 1 873160 43 7

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National Rivers Authority

SALMONID AND FRESHWATER FISHERIES STATISTICS FOR ENGLAND AND WALES, 1991

(Declared catches of salmon and migratory trout, by rod and by commercial instrument and inclusive of the available catch data for eels and freshwater fish).

This report has been prepared by the National Rivers Authority, with assistance from the Ministry of Agriculture, Fisheries and Food, Directorate of Fisheries Research, Lowestoft. Data for the years 1983-1988 have been published in the MAFF Fisheries Research Data Report Series.



Fisheries aims

- To maintain, improve and develop fisheries.

Fisheries objectives

- Protect and conserve salmon, trout, freshwater eel and, where appropriate, coastal fisheries.
- Regulate fisheries through the enforcement of a consistent series of licences, Orders, byelaws and consents.
- Monitor the fisheries status of rivers and inland estuary and, where appropriate, coastal waters.
- Formulate policies to maintain, improve and develop fisheries and restore and rehabilitate damaged fisheries.
- Provide a fisheries service which is responsive to the needs of the public and which is based on a sound charging system.

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1. INTRODUCTION

This report is the third compilation of salmon and migratory trout catch statistics for England and Wales published by the National Rivers Authority. For the years 1983-88, these statistics were published by the Ministry of Agriculture, Fisheries and Food, Directorate of Fisheries Research in their Data Report Series.

The 1991 data have been presented in a broadly similar format to those of 1989 and 1990

It is important to remember that the catch data recorded in this document represent declared catches only and as such will not be an entirely accurate record of the total numbers of fish landed. Furthermore, the relationship between catch and stock size is difficult to establish regardless of the accuracy of the catch data. Great care must, therefore, be taken in using these figures to derive anything beyond a measure of catch.

2. NATIONAL SCALE READING PROGRAMME

The results from the national scale reading programme appear in Table 13. Scale samples were collected from a range of fisheries by NRA personnel and forwarded to the Regional Fisheries Laboratory in Brampton, Anglian Region. However the Southern Region scale sample was sent to MAFF. Most of the scale reading was undertaken by a single reader, Mr R M Handford, to ensure consistency between samples. Since the responsibility for scale reading had transferred from MAFF to the NRA, it was essential that continuity between and within years was maintained. This was facilitated by arranging expert training and support services for Mr Handford by the former scale reader from MAFF, Mr W D Riley. All scale reading was carried out according to agreed ICES guidelines (Shearer, 1992). Salmon age data for Severn-Trent were supplied by the Region.

The methods employed for estimating the relative proportions of salmon and grilse in the regional catches were as used in 1987 (Russell and Buckley, 1989). The specific method of estimation is indicated for each NRA Region in Table 13.

3. REVIEW OF CATCHES IN 1991

Catch statistics vary in accuracy from year to year, and catches themselves fluctuate because of a wide variety of influencing factors. All available information regarding these factors should be considered to avoid undue significance being attributed to changes in catch which may occur in any one year. Those factors likely to have affected catches during 1991 (together with the summarised data presented in Tables 17-20) have been used to provide the following review of the 1991 catch data in relation to those of recent years (1986-90).

3.1 Overview

For the third consecutive year the principal influence on catches of both salmon and sea trout in all areas during 1991 was the climate. Low rainfall during 1989 and 1990 continued through the winter of 1990/91, with only a small improvement during the late summer in some regions. The resulting river flows were low for most of the fishing season and both commercial and rod catches were poor in many regions. However, despite the prevailing conditions, above average catches were observed in some areas.

The declared salmon net catch in England and Wales in 1991 was 48% lower than in 1990 and 49% below the average for the previous five years. In all regions, with the exception of Anglian, the salmon net catch in 1991 was the lowest recorded over this period. The declared sea trout net catch was 9% lower than that recorded in 1990, and 27% below the 5-year average. As with the salmon catch, the sea trout net catch for most regions was the lowest recorded over the period 1986-91.

The declared rod catch of salmon was marginally lower (6%) than in 1990 and 32% below the 5-year average. Catches were poor in all regions except North West Region, where they were up by 24% on 1990 and 38% on the average for the previous five years. Sea trout catches improved on 1990 in the south, west and north west, and, overall, showed an increase of 29% on 1990 but were poor compared to recent years, being 40% below the 5-year average. North West Region was again the only region to show any improvement on the average for the previous five years. However, greatly improved reporting rates may well account for the improved catches of both salmon and sea trout in North West Region. Low flows persisted for much of the year in many regions and conditions for both upstream movement of fish and angling were generally unfavourable. Salmon rod licence sales were very similar to the previous two years, although angling effort is likely to have been reduced due to the prevailing conditions. Few mortalities of adult salmon were reported in 1991 and the depressed oxygen levels experienced in 1989 and 1990 as a result of low flows and high temperatures, did not appear to be as critical.

There is some evidence to suggest that movements of salmon in some rivers in 1991 may have been impaired by the low prevailing flows. As in 1989 and 1990,

it was noted that spawning occurred lower down some catchments than normal. It is not clear how this may have impacted upon recruitment, but juvenile monitoring programmes may indicate the extent of any such problems.

Changes in the scale reading programme for 1991 meant that scales were not collected for all of the regions for which data were previously available. For those regions for which comparisons with 1990 was possible, it appeared that the proportions of grilse in both the rod and net catches were generally higher in 1991 than in 1990. In 1991, the highest estimated proportion of grilse in regional catches was recorded for Welsh Region (77%). For rods, the highest estimated proportion of grilse was recorded in North West Region (74%). The lowest grilse proportions were recorded in Severn-Trent Region.

3.2 Northumbria

The salmon net catch in the Northumbria Region fishery was 48% lower than in 1990 and 46% lower than the 5-year average. The sea trout net catch was also moderately below that in 1990 and 25% lower than the average of the past five years. No changes in netting practices were reported but netsmen spent an average of about 47 days netting, compared with 54 days in 1989 and 1990. The reduction in effort was seen in both the northern and southern area drift net fisheries as well as in the T-net fishery. This fall in effort may reflect unfavourable fishing conditions and low perceived abundance of fish.

The salmon catch per unit effort (CPUE) for drift nets in 1991 was lower than that recorded in 1990, by 38% in the northern area and 50% in the southern area. By contrast, the CPUE for salmon caught by T-nets was 10% higher in 1991 than in 1990. The overall CPUE for sea trout was the same as in 1990. In the northern area the CPUE for drift nets was unchanged on 1990, while the T-nets showed a 5% increase. There was an 8% fall in CPUE in the southern area drift net fishery.

Declared rod catches of both salmon and sea trout were considerably lower than the 5-year average, by 23% and 36% respectively, with the sea trout catch being the lowest recorded over the period. The catch of salmon was 13% lower than that in 1990 and for sea trout was 22% lower. For the third successive year low water levels led to water quality problems. One such problem in May killed approximately 100 adult salmon and several sea trout on the River Tyne at Wylam.

3.3 Yorkshire

The net catch of salmon in the Yorkshire coastal fishery decreased by 66% compared with that in 1990 and by 57% on the 5-year mean, and was the lowest recorded catch for the period. The sea trout net catch was similar to that in 1990, but 23% below the 5-year mean. The number of net licences issued in 1991 fell by 3, with a reduction from 22 to 21 drift nets and 37 to 35 'T' or 'J' nets. Overall,

netmen spent an average of 41 days fishing in 1991, 7 days less than in 1989 and 1990. However, there was a particularly marked reduction in the average number of days spent drift net fishing, from 51 in 1990 to 38 in 1991. In the southern part of the area the reduction may be attributed to the persistent northerly gales which disrupted fishing activities from the opening of the season until early June. One further factor which may have depressed fishing effort was the low price offered for salmon and sea trout in 1991 and the high value of other sea fish, crabs and lobsters. The overall CPUE for salmon was lower than in 1990, falling by 55% for drift nets and 18% for 'T' or 'J' nets. The overall CPUE for sea trout in 1991 however was about 26% higher than in 1990, with the CPUE for drift nets rising very slightly by 3% while that for 'T' or 'J' nets rose by 35%.

Reported rod catches of both salmon and sea trout in Yorkshire Region were lower than in 1990 and well below the 5-year average, 74% and 47% respectively. Poor catches and reduced angler effort on the River Esk were attributed to very low flow conditions and an observed late run of salmon in November after the close of the fishing season. The CPUE of salmon caught by rod in 1991 was estimated at 0.01 fish per licence day, and that for sea trout at 0.11, both lower than in 1990. Rod licence sales were 18% lower in 1991 than 1990.

3.4 Anglian

The declared catch of sea trout in the East Anglian coastal fishery in 1991 was similar to that in 1990. Very few salmon are caught in the coastal fishery and there are no directed rod fisheries for migratory salmonids within the region.

3.5 Thames

The low flow conditions experienced during 1989 and 1990 continued through 1991, resulting in a very poor run of salmon. In addition, sporadic water quality problems were experienced in the tideway as a result of storm sewage overflow following heavy rainfall in the London area. Only one salmon was taken by rod in 1991.

3.6 Southern

The declared net catch of salmon in 1991 was substantially lower than in 1990 and fell to less than 10% of the 5-year average, representing the lowest catch for the period. The sea trout net catch, however, was 26% higher than in 1990 but was still only one third of the 5-year average. The seine net operated on the River Itchen at Woodmill Pool was fished more frequently in 1991 than in 1990, but many of the fish were released alive as part of a radio tracking investigation. The CPUE for the Woodmill net in 1991, including the tagged fish, was 6.40 salmon per day, a decrease on 1990, and 6.30 sea trout per day, a small increase. CPUE

data were not available for the public water seine nets operated in Southampton Water and the Solent.

Rod catches of salmon and sea trout were again poor due to continued drought conditions and consequent reduced angler efficiency and effort. The catch of salmon was half that of 1990 and 72% lower than the 5-year average. Counter data for the two principal migratory salmonid rivers of the region, the Test and Itchen, confirm that numbers of returning adult salmonids were lower in 1991 than 1990. Estimates of the total returning stock suggest that the number of salmon in 1991 was 60% of that in 1990, and 30% of that in 1989. The low catch is clearly a result of a small available stock.

3.7 Wessex

The net catch of salmon in Wessex Region was 58% lower than that recorded in 1990, and at 76% below the 5-year average was the lowest recorded catch for the period. The sea trout catch was 36% lower than in 1990 and 27% below the 5-year average, also the lowest recorded catch for the period.

Rod catches of salmon were very poor in 1991 being 52% lower than in 1990, itself a poor year, and 74% lower than the 5-year average, and clearly the lowest during the period. There was however an improvement in sea trout rod catches of 43% on 1990. However, as with the salmon, the sea trout rod catch was substantially (86%) lower than the 5-year average. Salmon rod licence sales fell by 22% from 1990, and rod effort was probably reduced in response to the continuing unfavourable angling conditions and low numbers of fish.

3.8 South West

Salmon and sea trout net catches fell below those recorded in 1990 by 50% and 6% respectively. Both catches were at least 50% below the 5-year average and were the lowest recorded catches for the period. Fishing effort in 1991, as determined by the number of licensees fishing, was marginally lower than in 1990. Drift netmen on the River Camel continued to be compensated by the NRA for a three year cessation of netting (1989-1991), as part of a salmon rehabilitation scheme on that river following a major pollution incident in 1988. Similarly the Taw/Torridge rehabilitation scheme continued and, in 1991, all netmen were compensated not to fish. For those fisheries in South West Region unaffected by effort changes, catches were still lower in 1991 than 1990, by around 50% for salmon and 6% for sea trout. The fall in net catches is therefore likely to have been caused by poor runs of fish, dry weather, low flows and adverse fishing conditions. CPUE data are not available for South West Region.

Rod catches of salmon were 27% lower in 1991 than 1990 and fell to 57% below the 5-year average, the lowest catch for the period. Sea trout catches however,

rose by 54% on the poor catch of 1990, but were 35% below the 5-year average. As in 1990 the low flow conditions prevailed for most parts of the region for much of the season and the migration of fish into rivers was impaired. There were a few spates, but the fish did not appear to run on them, and the grilse arrived late in the season. Salmon rod licence sales increased slightly by 7% on 1990, but angling effort is unlikely to have increased due to the continuing poor fishing conditions.

3.9 Severn-Trent

The catch of salmon by nets and fixed engines in the River Severn in 1991 was 60% lower than in 1990 and 53% below the 5-year average and the worst recorded catch for the period. The number of seine nets decreased by one from 9 to 8 and the number of lave nets (full- and half-season nets combined) from 64 to 45. Although the number of ranks of fixed engines rose slightly from 16 to 18, the actual number of putchers fishing decreased from 4849 to 4479. Catch per licence in 1991 for all three methods of fishing was considerably lower than in 1990 (by more than 80% in the case of seine nets). Grilse comprised an estimated 30% of the fish caught in the fishery in 1991 compared with 39% in 1990 and 51% in 1989.

As in 1990 the declared rod catch on the Severn was particularly poor. The catch was 9% lower than in 1990 and 64% lower than the 5-year average. Although the 1991 salmon fishing season started well with some reasonable catches of spring-run salmon, the low flow conditions from June through to September appeared to reduce catches. As in 1990, extra water during October resulted in only a few reported catches of salmon. Despite this the evidence from redd counting suggested that the 1991 spawning season was better than average and considerably better than anticipated from observed catches. However, in common with 1989 and 1990, it was noticeable that most spawning took place in the main rivers rather than minor tributaries, a situation probably associated with low water conditions.

The coincidence of spring tides, low flows and high temperatures again produced adult salmon mortalities, however, only 5 fish were reported this year compared with 64 in 1990 and 278 in 1989.

Salmon rod licence sales for the River Severn in 1991 were 10% lower than 1990, although, as in other regions and recent years, angling effort will also have been adversely affected by the prevailing weather and river flow conditions.

3.10 Welsh

The net catches of both salmon and sea trout in Welsh Region were lower in 1991 than 1990 (by 30% and 25% respectively). Both were also more than 35% below the 5-year average and the worst recorded for the period. Fifteen fewer licences were issued in 1991 than 1990 and some change in distribution also occurred, with a small increase in the number of coracle licences but a reduction in the number of seine drift and wade nets. The overall impact of these changes on fishing effort is not known, but may have been significant. The overall CPUE for Welsh Region in 1991 was lower for both salmon (0.62 fish per licence-day) and sea trout (0.55 fish per licence-day) than in 1990 (0.78 and 0.64 fish per licence-day respectively). The CPUE for salmon ranged from 0 to 4.50 fish per licence-day, the highest figure being for the Conwy basket trap. For most fisheries in the region, however, the CPUE was well below 1 salmon per licence-day, as in 1989 and 1990. For sea trout, CPUE ranged from 0 to 3.07 fish per licence-day, the latter figure for the Dwyfawr seine nets. Grilse were estimated to have comprised 69% of the salmon net catch in the region in 1991, an increase on that estimated for 1990 (49%).

Rod catches of salmon in 1991 were 16% lower than in 1990, however sea trout catches were 15% higher than in 1990. Catches of both species were 48% below the 5-year average and in the case of salmon, the worst recorded catch for the period. As elsewhere, the low flow conditions were unsuitable both for upstream migration of fish and angling. Rod licence sales for 1991 were very similar to those in 1990 and 1989.

For the second year CPUE data were available for rod fisheries in Wales. For salmon these ranged from 0 to 0.08 fish per rod-day and for sea trout from 0 to 0.45 fish per rod-day, the highest figures being recorded on the River Ogwen and River Aeron respectively. The overall CPUE for Welsh Region was 0.03 salmon and 0.16 sea trout per rod-day, compared with 0.02 and 0.05 respectively in 1990.

3.11 North West

Net catches of salmon and sea trout in 1991 were lower than in 1990 by 19% and 11% respectively. Both catches were considerably lower than their 5-year averages (26% for salmon and 48% for sea trout) and were the lowest recorded catches for the period. Little change occurred in the number of fishing licences issued, falling by one from 233 to 232. CPUE data showed that, for salmon, licensees caught between 0.23 and 2.64 fish per licence-tide, with the highest figure relating to the drift nets in the Lune Estuary. For sea trout, the CPUE ranged from 0 to 0.90, the latter figure for the Lune seine net. Overall the CPUE figures for the region were 0.51 fish per licence-tide for salmon and 0.33 fish per licence-tide for sea trout, these figures being about 19% and 11% lower respectively, than those in 1990.

The rod catch of salmon in North West Region was 24% higher than that in 1990 and for the second consecutive year above the 5-year average (by 38%). The sea

trout catch was 85% higher than the poor catch of 1990, and uniquely in 1991, was the only region in which the catch was above the 5-year average, by a modest 9%. The apparent increase in rod catches in 1991 may be attributable to a change in the reporting procedures. For the first time, reminders were sent to anglers and, as a result, the percentage return increased from about 33% to 70%. Dry weather and consequent low flows adversely affected angling during spring and early summer so that most fish were caught after August, as in 1989 and 1990. A single migratory salmonid rod licence was implemented in 1991 replacing the separate salmon and migratory trout licences issued previously.

The catch per rod-day for salmon ranged between 0.01 and 0.2 fish per rod-day, the highest figure, as in 1990, being recorded for the River Derwent. For sea trout, the CPUE ranged between 0.01 and 0.14 fish per rod-day, the latter figure for the Border Esk. The regional CPUE figure for salmon was 30% lower than in 1990, but remained the same for sea trout.

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Table 1 National Rivers Authority annual statistics collection procedures for 1991 - commercial data.

NRA Region	Return form supplied	Return prepaid	Return required	Separate reporting of salmon and grilse	Separate reporting by weight groups (not S/G)	Catch data required from licensees				Catch reported separately for each method of capture	Effort data collected
						Daily record of individual fish	Daily aggregates	Weekly aggregates	Monthly aggregates		
Northumbria	Yes	Yes	Monthly	Yes (\pm 7lbs)	No	-	Yes	-	-	Yes	Yes
Yorkshire	Yes	Yes	15 Nov	Yes (\pm 7lbs)	No	-	Yes	-	-	Yes	Yes
Anglian	Yes	No	Monthly	No	Yes	Yes (a)	Yes	-	-	No	No
Thames	----- No commercial fisheries for salmon or migratory trout -----										
Southern	Yes	No	30 Nov	No	Yes (b)	-	-	-	Yes	Yes	Yes (c)
Wessex	Yes	No	15 Nov	Yes (\pm 8lbs)	No	-	-	Yes	-	Yes	No
South West	Yes	Yes	Monthly	No	No	Yes	-	-	-	Yes	No
Severn-Trent	Yes	Yes	31 Oct	No	Yes	Yes	-	-	-	Yes	Yes (d)
Welsh	Yes	Yes	Monthly	No	Yes (e)	-	Yes	-	-	Yes	Yes
North West	Yes	Yes	Monthly	No	No	Yes	-	-	-	Yes	Yes

Key: (a) Salmon only.
 (b) Numbers of fish recorded for 3 weight categories, <7, 7-15, >15lbs.
 (c) Effort data in 1991 collected only for the R. Itchen.
 (d) Voluntary for 1991, compulsory thereafter.
 (e) Numbers of fish recorded in 1lb weight groups up to 20lbs. Large fish entered individually.

Table 2 National Rivers Authority annual statistics collection procedures for 1991 - rod data.

NRA Region	One form for salmon and sea trout	Return form part of licence	Return pre-paid	Return required	Number of reminders issued	Catch data required from licensees						
						Daily record of nos. caught	Individual weights of fish	Exact date of capture	River or place of capture	Method of capture (e.g. bait)	Effort data (e.g. days fished)	Separate reporting of salmon and grise
Northumbria	Yes	Yes	Yes	30 Nov	0	No (monthly totals)	Yes	No (monthly totals)	Yes	No	No	No
Yorkshire	Yes	Yes(a)	No	15 Nov	2	No (monthly totals)	Yes	No (monthly totals)	Yes	No	Yes(b)	Yes (± 7lbs)
Anglian	No rod fisheries for salmon or migratory trout											
Thames	Negligible catches - No return forms used			30 Nov	0	Yes	Yes	Yes	Yes	No	No	No
Southern	No (c)	Yes	No	30 Nov	0	No	No	No	Yes	No	No	No
						Monthly totals (But full details for sea trout)						
Wessex	No (c)	Yes	No	15 Nov	2	No	No	No	Yes	No	No	Yes (± 8lbs)
						Monthly totals						
South West	Yes	Yes (d)	Yes	14 days after expiry of licence	0	Yes	Yes	Yes	Yes	No	No	No
Severn-Trent	Yes	No	Yes	31 Oct	1 or 2	Yes	Yes	Yes	Yes	No	Yes (e)	No
Welsh	Yes	Yes	Yes	7 days after expiry of licence	1 or 2	Yes	Yes	Yes	Yes	Yes	Yes	No
North West	Yes	Yes	No	30 Nov	1	Yes	Yes	Yes	Yes	No	Yes	No

Key: (a) River Esk (Special licence) has separate return form supplied with licence. Otherwise, return form part of licence.
 (b) Effort data required for River Esk.
 (c) Sea trout can be fished for under either salmon or trout licences.
 (d) Licence stuck onto return card.
 (e) Voluntary.

Table 3 Number and value of commercial fishing licences issued - 1991 season.

NRA Region	Salmon and Migratory Trout					Eel		
	Fishing Method	Number (a)	Duty (£)	Number Endorsees	Value (£) (b)	Method	Number (a)	Value (£)
Northumbria	Coastal (N) drift or T nets	75	735.00	164	55157.80	Fyke nets	70	385.00
	Coastal (S) drift nets	46	660.00	89	30377.80			
	Total	121		253	85535.60			
Yorkshire	Coastal drift nets	21	590.00	50	12400.00	Fyke nets	(115)	540.50
	Coastal T or J nets	35	445.00	64	15587.80	Criggs (in strings) (Max. 10 pots per string)	(25)	117.50
	Total	56		114	27987.80	Total (20 Licensees)	(140)	658.00
Anglian	Coastal nets (various)	142	15.00	243	2178.60	Nets/Traps (Reg)	25	375.00
						Nets/Traps (Dist)	1079	8092.00
						Total	1104	8467.00
Thames	Nil					Fyke nets	160	1600.00
						Traps	6	12.00
						Pair trawls	1	100.00
						Total	167	1712.00
Southern	Seine nets	4	1.00	0	4.00	Traps	57	0
	Seine net (c)	1	110.00	0	110.00			
	Seine net (Sea trout) (d)	1	1.00	0	1.00			
	Total	6		0	115.00			
Wessex	Seine nets	7	147.00	12	1031.40	Fyke nets	10	1515.50
	Dip nets	5	47.40	3	237.60	Fixed traps	9	801.90
	Putcher ranks 250 Putchers (units of 50)	(5)	41.20	0	206.00	Elver nets	219	7227.00
	Total	13		15	1475.00	Total	238	9544.40
South West	Seine nets (single river) (e)	14	110.00	-	-	Fyke nets	34	0
	Seine nets (single river)	73	110.00	357	8101.40	Elver dip nets	6	0
	Seine nets (double river)	1	175.00	7	176.40			
	Fixed Engine (Weir) Avon (f)	1	175.00	-	-			
	Fixed Engine (Trap) Lyn	1	175.00	5	176.00			
	Drift nets (Camel) (g)	7	110.00	-	-			
	Total	97		369	8453.80	Total	40	0
Severn-Trent (h)	Lave nets (half season)	20	21.00	0	420.00	Elver dip nets	447	8940.00
	Lave nets (full season)	25	42.00	0	1050.00	Elver dip nets (Concessionary)	55	275.00
	Seine nets	8	100.00	40	808.00	Gloucester eel nets	8	52.00
	Fixed Engine ranks comprising:	18		0	2890.00	Putcheons/baskets (Up to 20 putcheons per licence)	9	58.50
	4479 Putchers (units of 50)	(106)	25.00			Fyke nets (>4m)	5	32.50
	570m of leaders:					Fyke nets (2-4m)	43	193.50
	Leaders <90m	(3)	33.00			Fyke nets (<2m)	13	45.50
	additional 20m lengths	(15)	9.00			(up to 5 <2m nets per licence)		
	Putt (1 fixed engine)	(2)	3.00			Total	580	9597.00
	Total	71		40	5168.00			
	Welsh	Compass nets	6	44.00	7	265.40	Elver dip nets	214
Coracle nets		22	Var	52	5988.40	Baited traps (20 per licence)	8	90.00
Wade nets		20	Var	53	341.60	Fyke nets	15	530.00
Seine nets		54	Var	165	17900.00			
Drift nets (incl. sling nets)		11	662.00	17	7285.40			
Trammel nets		4	389.00	5	1557.00			
Lave nets		9	16.00	0	144.00			
Putcher rank 1800 Putchers (units of 50)		(36)	48.00	0	1728.00			
Fish trap-basket		1	48.00	7	49.40			
Total		128		306	35259.20	Total	237	2760.00
North West		Haaf nets (Solway)	165	49.00	0	8085.00	Fyke nets (98)	10
	Cribs (Eden)	2	232.00	0	464.00	Dip nets	19	190.00
	Fishing Bauk (Esk)	1	259.00	4	259.80	Baskets (50)	2	30.00
	Drift nets (Cumbria Coastal)	4	250.00	17	1003.40			
	Drift nets (Ribbles)	6	160.00	13	962.60			
	Haaf nets (Lune)	26	102.00	0	2652.00			
	Drift nets (Lune)	10	265.00	24	2654.80			
	Seine net (Lune)	1	239.00	5	240.00			
	Seine nets (Duddon)	3	219.00	12	659.40			
	Lave nets (Kent)	8	120.00	0	960.00			
	Lave nets (Leven)	6	99.00	0	594.00			
	Total	232		75	18535.00	Total	31	710.00

Key: (a) Numbers represent the number of licensees, except for data in parentheses which represent numbers of licensed components on which duty is paid.
 (b) Value includes endorsee fees (@ £0.20 each).
 (c) This net operates under rights of ancient privilege and is charged according to the 5 year average catch.
 (d) Net operates under rights of ancient privilege in the river Beaulieu.
 (e) Taw and Torridge rehabilitation scheme in operation. Licensees paid not to fish in 1991.
 (f) Licence for Avon fixed engine bought by the NRA. Not used.
 (g) No drift nets operating during Camel rehabilitation scheme 1989-1991.
 (h) Salmon licence details are for R. Severn only. Eel licences apply to both Severn and Trent catchments.

Table 4 Type, individual duty charged and number of rod licences issued - 1991 season.

NRA Region/ Species	Season Duty (£)		Con. Season Duty (£)		Short No. Term Days (a) Duty (£)		Con. Short Term Duty (£)		Day Duty (£)		Con. Day Duty (£)		Other Duty (£)	
Northumbria														
Salmon+M.Trout	1745	55.00	571	27.50	456	14	17.50	-	-	343	8.00	-	-	-
Trout	7908	14.00	4338	7.00	996	14	5.50	-	-	2140	1.25	-	-	-
FW Fish	4739	5.50	3918	2.75	-	-	-	-	-	-	-	-	-	-
Yorkshire														
Salmon+M.Trout	71	52.00	39	26.00	19	7	21.20	9	10.60	54	10.60	13	5.30	-
Trout+FW Fish	71858	6.50	27395	3.25	9127	7	2.65	2458	1.30	-	-	-	-	100 0.95 (c)
Anglian														
All species	141077	7.50	48294	2.50	86567	7	1.50	-	-	-	-	-	-	263 0.70 (c)
All species	-	-	-	-	-	-	-	-	-	-	-	-	-	6 Var (b)
Thames														
All Species	103612	10.00	82525	3.00 (d)	28113	15	3.00	-	-	-	-	-	-	142 Var (e)
All Species	-	-	-	-	-	-	-	-	-	-	-	-	-	31 Var (b)
Southern														
Salmon	6	50.00	-	-	-	-	-	-	-	-	-	-	-	10 Var (b)
M.Trout+Trout+FW	57067	10.00	-	-	24181	28	5.00	-	-	-	-	-	-	55 Var (b)
All species	-	-	-	-	-	-	-	-	-	-	-	-	-	39232 2.00 (g)
Wessex														
Salmon+M.Trout	200	37.00	95	18.50	75	7	6.00	12	3.00	-	-	-	-	7 Var (b)
Salmon+M.Trout (h)	68	38.00	18	19.50	-	-	-	-	-	-	-	-	-	-
M.Trout+Trout	5573	11.50	1611	5.75	5043	7	2.80	354	1.40	-	-	-	-	13 Var (b)
M.Trout+Trout (h)	1901	12.50	343	6.75	-	-	-	-	-	-	-	-	-	-
FW Fish	9155	8.80	5061	4.40	15518	7	2.20	2787	1.10	-	-	-	-	4 Var (b)
FW Fish (h)	12978	9.80	2472	5.40	-	-	-	-	-	-	-	-	-	-
South West														
Salmon+M.Trout	1910	35.00	847	17.50	723	7	17.50	251	6.75	2777	4.50	361	2.25	4 Var (b)
Trout	1986	8.80	1350	4.40	1837	7	4.50	-	-	2418	2.00	725	1.00	21 Var (b)
FW Fish	6931	2.60	2640	1.30	9657	7	1.00	-	-	-	-	-	-	29 Var (b)
FW Fish	-	-	-	-	-	-	-	-	-	-	-	-	-	17 Var (c)
Severn-Trent														
Salmon (i)	884	33.00	535	11.50	91	28	13.50	-	-	48	7.00	-	-	-
Trout+FW Fish	209433	5.00	59522	2.00	32399	28	2.00	-	-	-	-	-	-	1 400.00 (b)
Trout+FW Fish	-	-	-	-	-	-	-	-	-	-	-	-	-	4296 1.00 (c)
Welsh														
Salmon+M.Trout	7756	36.00	3067	24.00	488	14	17.00	-	-	3110	4.00	-	-	6409 1.00 (j)
Salmon+M.Trout	-	-	-	-	1852	7	10.00	-	-	-	-	-	-	4 Var (b)
Trout	16658	10.00	7926	7.00	27052	14	2.00	-	-	-	-	-	-	-
FW Fish	8639	6.00	3360	4.00	-	-	-	-	-	-	-	-	-	-
North West														
Salmon+M.Trout	5021	31.20	1582	15.60	2268	7	7.80	-	-	-	-	-	-	5 Var (b)
Trout	21989	7.00	4953	3.50	11491	7	2.00	-	-	-	-	-	-	3 Var (c)
Trout	-	-	-	-	-	-	-	-	-	-	-	-	-	2 Var (b)
FW Fish	42893	5.50	8013	2.70	5908	7	1.40	-	-	-	-	-	-	78 Var (c)
FW Fish	-	-	-	-	-	-	-	-	-	-	-	-	-	1 Var (b)

Key: (a) Also applies to concessionary short term licences.
 (b) General licence. Various duties apply.
 (c) Block licences for 1 day and covering many anglers. Duty is per angler. A minimum total fee may apply.
 (d) Concessionary season includes OAP/disabled, junior and second rod.
 (e) Temporary one site licence. Duty is per angler.
 (f) Licence category covers short term + junior season licences.
 (g) Second rod.
 (h) Licences include a second rod for an additional fee of £1.00.
 (i) Salmon licences for R.Severn only. Trout & FW Fish licences permit salmon fishing in R.Trent.
 (j) Special junior licence (under 10 years old).

Table 5 Number and value of rod licences issued - 1991 season.

NRA Region	Salmon (a)		Migratory Trout (b)		Trout (b)		Freshwater Fish	
	Number	Value (£)	Number	Value (£)	Number	Value (£)	Number	Value (£)
Northumbria	3113			122291	15382	149231	8657	36839
Yorkshire	205			5846	110938			585358
Anglian	276207							1315415
Thames	214423							1375488
Southern	16	8800	120535					783079
Wessex	475	20209	(c)	(c)	14838	120093	47975	281822
South West	6893			110291	8337	52265	19274	33958
Severn-Trent	1558			36889	305651			1235303
Welsh	22686			399209	51636	276166	11999	65274
North West	8876			199704	38438	195440	56893	267308

Key: (a) Possession of a salmon rod licence also authorises the holder to fish for migratory trout, trout, freshwater fish and eels.
(b) Possession of a migratory trout or trout rod licence also authorises the holder to fish for freshwater fish and eels.
(c) No separate licences are issued. Migratory trout are fished for under either a salmon or trout licence.

Note: Dashed lines indicate that the licence number and value apply to the range of species covered.

Table 6 Number of licences issued and percentage return rate for rod fisheries - 1991 season.

NRA Region/ Species	% Season Return		Con. % Season Return		Short % Term Return		Con. % Short Term Return		% Day Return		Con. % Day Return		% Other Return	
	Northumbria Salmon+M.Trout	1745	36	571	37	456	20	-	-	343	12	-	-	-
Yorkshire Salmon+M.Trout	71	88	39	88	19	82	9	82	54	85	13	85	-	-
Southern (a) Salmon	6	100	-	-	-	-	-	-	-	-	-	-	10	100(b)
Wessex (a) Salmon	268	65*	113	65*	75	65*	12	65*	-	-	-	-	7	100(b)
South West Salmon+M.Trout	1910	43	847	52	723	40	251	46	2777	34	381	35	4	NA(b)
Severn-Trent Salmon	-	-	-	-	-	-	-	-	-	-	-	-	1558	65(c)
Welsh Salmon+M.Trout	7756	60	3067	73	5450	50 (d)	-	-	-	-	-	-	6413	NA(e)
North West Salmon+M.Trout	-	-	-	-	-	-	-	-	-	-	-	-	8871	70(c)
Salmon+M.Trout	-	-	-	-	-	-	-	-	-	-	-	-	5	100(b)

Key: (a) In the Southern and Wessex areas migratory trout are fished for under both salmon and trout licences, and so return rates for migratory trout cannot be calculated, but will be lower than those for salmon.
(b) General licences.
(c) Applies to all licence categories, no further breakdown available.
(d) Includes 14 day, 7 day and one day licences.
(e) Special junior licence (return not required).
NA Not applicable.
* Denotes estimate.

Note: Percentage return rate is calculated from: (number licence returns received/number licences sold) x100

Table 7 Annual commercial close seasons and weekly close times for salmon and migratory trout - 1991 season.

NRA Region	Area/Method	Salmon				Migratory trout (Where different)		
		Close Season		Weekly Close Time		Close Season		
		From	To	From	To	From	To	
Northumbria		1.9	25.3 (a)	1800 Fri	0600 Mon			
Yorkshire	Drift net T or J net	1.9	31.1 (a)	1800 Fri 2000 Fri	0600 Mon 0600 Mon	1.9	28/29.2	
Anglian		1.10	31.3	0600 Sun	2400 Mon			
Thames		No commercial netting						
Southern		1.8	14.2	0600 Sat	0600 Mon			
Wessex	Somerset	31.8	15.2	0600 Sat	0600 Mon			
	Avon+Stour	1.8	31.1 *	0600 Sat	0600 Mon (b)	1.8	14.4	
	Frome (part only)	1.10 *	31.5 *	0600 Sat	0600 Mon (b)	1.8	31.5	
	Other	1.8	31.3 *	0600 Sat	0600 Mon (b)	1.8	14.4	
South West	Avon	16.9	14.4	0600 Sat	0600 Mon			
	Axe	20.8	31.3	1800 Fri	0600 Mon			
	Camel	1.9	1.3	0600 Sat	0600 Mon			
	Dart	17.8	14.3	0600 Sat	0600 Mon			
	Exe	Upper reach	17.8	15.4	0600 Sat	0600 Mon		
		Lower reach	17.8	13.2	0600 Sat	0600 Mon		
	Fowey	1.9	1.3	0600 Sat	0600 Mon			
	Tamar District	1.9	1.3	0600 Fri	0600 Mon (c)			
	Taw+Torridge	1.9	31.3	0600 Sat	0600 Mon			
	R. Lyn District	1.9	31.3	0600 Fri	0600 Mon			
Teign	1.9	14.3	0600 Sat	0600 Mon				
Severn-Trent	Nets	1.9	31.1	1200 Sat	0600 Mon			
	Putts+Putchers (d)	16.8	15.4	-	-			
Welsh	Clwyd	1.9	14.3	2400 Thur	2400 Sun			
	Dee	1.9	28/29.2	2400 Thur	2400 Sun			
	Tywi+Taf	1.9	28/29.2	0600 Sat	1200 Mon			
	Usk	1.9	1.3	0600 Sat	0600 Mon			
	Wye Nets	1.9	31.1	0600 Sat	0600 Mon			
	Other Nets	Fixed Engines (d)	1.9	31.1	-	-		
		Fixed Engines (d)	1.9	31.3	0600 Sat	0600 Mon (e)		
16.8	15.4	-	-					
North West	Solway Firth	10.9	24.2 (f)	0600 Sat	2400 Sun			
	Eden	1.9	31.3 (f)	0600 Sat	0600 Mon			
	Ellen	1.9	31.3	0600 Thur	0600 Mon			
	Other	1.9	31.3	0600 Sat	0600 Mon			

Key:

(a) From 1987 season, nightly close time (2000-0400) has also applied.
 (b) Additional weekly close time between 2100-0500 Wed, Thur, and Fri applies.
 (c) Weekly close times vary: 1.3-31.5 0600 Fri to 0600 Mon, 1.6-31.8 0600 Sat to 0600 Mon.
 (d) No weekly close time for Fixed Engines.
 (e) With the exception of weekly close times for Teifi, Nevern, E. and W. Cleddau which are as for Tywi +Taf.
 (f) Close seasons changed by new byelaws which came into effect on 29 March 1988.

* Migratory trout close seasons are as for those of salmon except where indicated by an asterisk. Variations are given in the right-hand column. Weekly close times are the same for both species.

Notes: Close seasons and weekly close times are subject to local variations; the exact dates are determined by byelaws so that an individual river's spawning time can be taken into account. Some waters may not be open for the full duration of the season.

Table 8 Annual rod close seasons for salmon and migratory trout - 1991 season.

NRA Region	Area	Salmon		Migratory trout	
		From	To	From	To
Northumbria		1.11	31.1	1.11	2.4
Yorkshire		1.11	5.4	1.11	5.4
Anglian		29.9	28/29.2	29.9	28/29.2
Thames		1.10	31.3	1.10	31.3
Southern		3.10	16.1	1.11	31.4
Wessex	Frome (part only)+Piddle	1.10	28/29.2	1.11	14.4
	Other	1.10	31.1	1.11	14.4
South West	Avon	1.12	14.4	1.10	14.4
	R. Avon District	1.11	14.3	1.10	14.3
	Axe	1.11	14.3	1.11	14.4
	Camel	16.12	31.3	1.10	31.3
	Dart	1.10	31.1	1.10	14.3
	Exe	1.10	13.2	1.10	14.3
	Fowey	16.12	31.3	1.10	31.3
	Tamar+Plym	16.12	31.3	1.10	2.3
	R. Plym	16.12	31.3	1.10	2.3
	R. Yealm District	15.10	28/29.2	1.10	2.3
	Taw+Torridge	1.11	31.1	1.10	14.3
R. Lyn District	1.10	28/29.2	1.10	14.3	
Teign	1.10	31.1	13.10	14.3	
Severn-Trent		8.10	31.1	8.10	17.3
Welsh	Dee+Usk	18.10	25.1	18.10	19.3
	Wye Upper reach+Tributaries	26.10	25.1	18.10	19.3
	Lower reach	18.10	25.1	18.10	19.3
	Other	18.10	19.3	18.10	19.3
North West	Eden	15.10	14.1	16.10	30.4
	Other (a)	1.11	31.1	16.10	30.4

Key: (a) Migratory trout close season differs for rivers Annas, Bleng, Esk, Mite, Irt, Calder and Ehen for which 1.11 to 30.4 applies.

Notes: Close seasons and weekly close times are subject to local variations; the exact dates are determined by byelaws so that an individual river's spawning time can be taken into consideration. Some waters may not be open for the full duration of the season.

Table 9 Monthly reported salmon and grilse catches by commercial instruments - 1991 season.

NRA Region	River/ Fishery	Fishing Method	No. Lics	Month												Total Number	Total Weight (Kg)	Av. day/ lic.	Catch/ Lic. day
				Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Known	Un-						
Northumbria	Coastal (N)	Drift nets	75 (a)	-	96	244	1380	2018	5280	3528	-	0	12548	49153	38.9	4.54			
		T nets	75 (a)	-	2	9	189	328	1253	646	-	0	2427	8551	8.7	3.71			
	Coastal (S)	Drift nets	48	-	0	43	380	720	3150	3257	-	0	7550	27129	48.6	3.38			
		Whole area	Total	121	-	100	296	1949	3066	9683	7431	-	0	22525	84833	48.6	3.68		
Yorkshire	Coastal	Drift nets	21	0	0	0	10	172	1028	1155	-	0	2365	8623	38.0	2.96			
		T or J nets	35	0	0	0	11	53	242	233	-	0	539	1777	42.1	0.37			
	Whole area	Total	56	0	0	0	21	225	1270	1388	-	0	2904	10400	40.6	1.28			
Anglian	Coastal	Nets	142	-	-	0	3	10	11	5	5	0	34	108					
Southern	Itchen	Seine net (private)	1 (b)	0	0	0	0	1	24	-	-	0	25	77	10.0	6.40			
		Seine nets	5	0	0	0	0	0	0	0	-	0	0	0					
	Whole area	Total	6	0	0	0	0	1	24	-	-	0	25	77					
Wessex	Avon + Stour	Seine nets	6	0	0	0	1	36	77	-	-	0	114	425					
		Seine net	1	-	-	0	5	5	8	-	-	0	18	72					
	Poole Harbour	Dip nets	5	0	0	0	1	1	2	1	-	0	5	26					
		Putcher ranks	1	0	0	0	4	12	12	2	-	0	30	129					
	Parrett	River total	6	0	0	0	5	13	14	3	-	0	35	155					
		Whole area	Total	13	0	0	0	11	54	98	3	0	167	652					
South West	Exe	Seine nets	18	0	0	9	32	88	319	144	-	0	592	1878					
		Seine nets	10	-	1	13	65	72	269	204	-	0	624	1947					
	Teign	Seine nets	18	-	1	5	60	77	115	83	-	0	341	1218					
		Fixed Engine	1 (c)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Dart	Seine nets	4	-	0	0	14	15	55	40	-	0	124	406					
		Seine nets	14	-	5	18	96	161	324	255	-	0	859	2785					
	Avon	Seine net	1	-	0	1	11	23	38	39	-	0	113	347					
		Seine nets	5	-	0	1	11	23	38	39	-	0	113	347					
	Tavy	Seine nets	4	-	0	0	1	16	26	15	-	0	60	188					
		Seine nets	14	-	5	18	96	161	324	255	-	0	859	2785					
	Tamar	Seine net	1 (d)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Seine nets	5	-	0	1	11	23	38	39	-	0	113	347					
Tavy/Tamar	Seine nets	4	-	0	0	1	16	26	15	-	0	60	188						
	Seine nets	1	-	-	0	1	6	5	5	-	0	17	50						
Lynher	Seine nets	4	-	0	0	1	16	26	15	-	0	60	188						
	Fixed Engine	1	-	-	0	1	6	5	5	-	0	17	50						
Fowey	Seine nets	4	-	0	0	1	16	26	15	-	0	60	188						
	Fixed Engine	1	-	-	0	1	6	5	5	-	0	17	50						
Lyn	Seine nets	4	-	0	0	1	16	26	15	-	0	60	188						
	Fixed Engine	1	-	-	0	1	6	5	5	-	0	17	50						
Whole area	Total	76	0	7	46	260	456	1154	765	-	0	2730	8566						
	Total	76	0	7	46	260	456	1154	765	-	0	2730	8566						
Severn-Trent	Severn	Seine nets	8	0	0	0	12	4	15	12	-	0	43	185					
		Lave nets	45 (e)	2	14	28	87	85	88	54	-	0	338	1741					
	Fixed Engines	18	-	-	54	336	480	354	142	-	0	1366	6710						
Whole area		Total	71	2	14	82	435	569	437	208	-	0	1747	8646					
Welsh	Wye	Lave nets	9	0	0	0	0	0	6	0	-	0	6	32	30.0	0.02			
		Drift nets	8	0	4	33	123	426	427	141	-	0	1154	6323	84.5	1.71			
	Usk	Putcher rank	1	0	0	0	83	112	158	85	-	0	398	2372	123.0	3.24			
		River total	9	0	4	33	186	538	585	206	-	0	1552	8695	123.0	1.94			
	Tywi	Seine nets	8	0	0	0	8	14	18	15	-	0	55	219	65.9	0.10			
		Coracle nets	10	0	1	5	8	9	10	18	-	0	49	208	48.7	0.10			
	River total	18	0	1	5	18	23	28	31	-	0	104	427	114.6	0.10				
		Wade net	1	0	0	0	0	1	0	0	-	0	1	5	35.0	0.03			
	Taf	Coracle net	1	0	0	0	3	2	0	0	-	0	5	18	28.0	0.18			
		River total	2	0	0	0	3	3	0	0	-	0	6	23	35.0	0.09			
	S.W. Coastal	Wade nets	19	0	0	0	0	0	1	7	-	0	8	19	3.2	0.13			
		Seine nets	1	0	0	0	0	0	0	0	-	0	0	0	8.0	0.00			
	Fishery total	20	0	0	0	0	0	1	7	-	0	8	19	0.12					
		Compass nets	6	0	0	0	0	0	2	1	-	0	3	6	13.5	0.04			
	E+W. Cleddau	Seine nets	5	0	0	0	9	12	17	22	-	0	60	232	57.2	2.21			
		Coracle nets	11	0	0	0	11	16	11	4	-	0	42	161	42.3	0.08			
	Teifi	River total	16	0	0	0	20	28	28	26	-	0	102	393	65.5	0.14			
		Seine nets	4	0	0	0	3	2	7	6	-	0	18	69	48.8	0.10			
	Dysynni	Seine nets	1	0	0	0	0	6	1	0	-	0	7	18	38.0	0.19			
		Seine nets	3	0	0	0	3	4	0	0	-	0	7	20	17.7	0.13			
	Mawddach	Seine net	2	0	0	0	6	11	3	0	-	0	20	53	43.5	0.23			
		Seine nets	2	0	0	0	1	12	5	2	-	0	20	85	21.0	0.48			
	Seiont	Seine nets	1	0	0	0	0	4	0	25	-	0	29	149	73.0	0.40			
		Seine nets	2	0	0	0	0	4	31	55	-	0	90	342	48.0	0.94			
	Ogwen	Basket trap	1	0	0	0	0	3	0	6	-	0	9	25	2.0	4.50			
		Seine nets	5	0	0	0	0	4	24	35	-	0	63	247	26.2	0.40			
	Conwy	River total	6	0	0	0	0	7	24	41	-	0	72	272	45.0	0.54			
		Drift nets	3	0	0	0	0	4	84	47	-	0	135	386	45.0	1.00			
	Ctwyd	Trammel nets	4	0	3	4	1	4	73	108	-	0	183	943	44.0	1.10			
		Seine nets	20	0	2	4	19	69	205	373	-	0	672	2634	56.8	0.59			
	Dee	River total	24	0	5	8	20	73	278	481	-	0	885	3577	66.8	0.66			
		Whole area	Total	128	0	10	48	258	719	1083	928	-	0	3044	14566	41.4	0.82		
	North West (f)	Ribble	Drift nets	6	-	-	0	2	49	50	105	-	0	208	957	50.8	0.68		
			Haaf nets	26	-	-	0	18	23	183	343	-	0	567	2089	56.3	0.39		
		Lune	Drift nets	10	-	-	0	0	26	375	1071	-	0	1472	5288	55.8	2.64		
			Seine net	1	-	-	0	0	9	22	34	-	0	65	232	121.0	0.54		
River total		37	-	-	0	18	58	580	1448	-	0	2104	7609	57.9	0.98				
		Lave nets	8	-	-	0	0	8	67	110	-	0	185	894	33.4	0.69			
Kent		Lave nets	6	-	-	0	1	11	38	20	-	0	70	194	44.5	0.26			
		Seine nets	3	-	-	0	0	4	4	9	-	0	17	60	24.3	0.23			
Duddon		Fishing baulk	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Drift nets	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
S&W Cumbria (g)		Area total	5	-	-	0	0	0	7	188	-	0	195	719	47.6	0.82			
		Haaf nets	165	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Eden + Esk (h)		Cribs	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		River Total	167	-	1	3	52	71	430	842	323	0	1722	6447	34.9	0.29			
Whole area		Total	232	-	1	3	73	201	1176	2722	323	0	4499	16680	38.0	0.51			
	Total	232	-	1	3	73	201	1176	2722	323	0	4499	16680	38.0	0.51				

England and Wales

37875 144581

Key:

- (a) Northern area licences are for both drift and T nets. Not all licensees use T nets.
- (b) Some fish were also caught and released as part of tracking programmes; these fish have been excluded from the declared catch data, but have been included (where appropriate) for the purpose of calculating catch per licence-day.
- (c) Licence purchased by NRA South West region but was not used.
- (d) Catches included under Tavy and Tamar as appropriate.
- (e) Figures for half- and full-season lave nets combined.
- (f) Effort data for the NRA North West region are measured as catch per licence-tide not catch per licence-day.
- (g) Catches are not disclosed for reasons of confidentiality and are thus amalgamated as an area total. In past years, the area total included Ellen haaf nets and/or Derwent coops, but these were not fished in 1991.
- (h) Catch by method not disclosed for reasons of confidentiality.

Table 10 Monthly reported migratory trout catches by commercial instruments - 1991 season.

NRA Region	River/ Fishery	Fishing Method	No. Lics										Un-known	Total Number	Total Weight (kg)	Av. day/ Lic.	Catch/ Lic. day
				Feb	Mar	Apr	May	Jun	Jul	Aug	Sep						
Northumbria	Coastal (N)	Drift nets	75 (a)	-	3	68	572	1478	1674	619	-	0	4414	12236	36.9	1.60	
		T nets	75 (a)	-	0	45	652	2110	2991	1082	-	0	6880	12800	8.7	10.52	
	Coastal (S)	Drift nets	46	-	0	54	1004	2969	5894	3654	-	0	13575	32147	48.6	6.07	
	Whole area	Total	121	-	3	167	2228	6557	10559	5355	-	0	24869	57183	46.8	4.40	
Yorkshire	Coastal	Drift nets	21	-	0	0	75	850	1771	1374	-	0	4070	9263	38.0	5.10	
		T or J nets	35	-	0	0	463	2685	5369	3197	-	0	11714	22828	42.1	7.94	
	Whole area	Total	56	-	0	0	538	3535	7140	4571	-	0	15784	32091	40.6	6.94	
Anglian	Coastal	Various nets	142	-	-	16	96	260	635	608	678	0	2293	4121			
Southern	Itchen	Seine net (private)	1	0	0	0	0	13	50	-	-	0	63	150	10.0	6.30	
	Hants area	Seine nets	5	0	0	0	0	0	0	-	-	0	0	0			
	Whole area	Total	6	0	0	0	0	13	50	-	-	0	63	150			
Wessex	Avon + Stour	Seine nets	6	-	-	0	0	128	170	-	-	0	298	699			
	Poole Harbour	Seine net	1	-	-	0	1	6	7	-	-	0	14	49			
	Parrett	Dip nets	5	0	0	0	0	0	0	0	-	0	0	0			
		Putchers	1	0	0	0	0	0	0	0	-	0	0	0			
		River total	6	0	0	0	0	0	0	0	-	0	0	0			
	Whole area	Total	13	0	0	0	1	134	177	0	-	0	312	748			
South West	Exe	Seine nets	18	0	0	12	10	9	3	3	-	0	37	45			
	Teign	Seine nets	10	-	2	206	348	217	176	13	-	0	962	1382			
	Dart	Seine nets	18	-	5	75	178	83	72	11	-	0	424	644			
	Avon	Fixed Engine	1 (b)														
	Tavy	Seine nets	4	-	1	13	55	39	8	2	-	0	118	186			
	Tamar	Seine nets	14	-	4	22	96	53	30	2	-	0	207	344			
	Tavy/Tamar	Seine net	1 (c)														
	Lynher	Seine nets	5	-	0	0	25	18	3	0	-	0	46	80			
	Fowey	Seine nets	4	-	1	7	42	79	9	1	-	0	139	183			
	Lyn	Fixed Engine	1	-	-	0	3	7	4	3	-	0	17	30			
	Whole area	Total	76	0	13	335	757	505	305	35	-	0	1950	2894			
	Welsh	Usk	Drift nets	8	0	0	1	9	23	12	2	-	0	47	156	84.5	0.07
Putcher rank			1	0	0	0	3	4	4	0	-	0	11	20	123.0	0.09	
River total			9	0	0	1	12	27	16	2	-	0	58	176		0.07	
Tywi		Seine nets	8	0	0	20	261	243	95	12	-	0	631	1539	65.9	1.20	
		Coracle nets	10	0	1	55	200	183	43	7	-	0	489	1200	48.7	1.00	
		River total	18	0	1	75	461	426	138	19	-	0	1120	2739		1.10	
Taf		Wade net	1	0	0	0	0	1	0	0	-	0	1	1	35.0	0.03	
		Coracle net	1	0	1	11	16	16	0	0	-	0	44	63	28.0	1.57	
		River total	2	0	1	11	16	17	0	0	-	0	45	64		0.71	
S.W.Coastal		Wade nets	19	0	0	1	3	3	1	12	-	0	20	29	3.2	0.33	
		Seine nets	1	0	0	0	4	0	0	0	-	0	4	8	8.0	0.50	
		Fishery total	20	0	0	1	7	3	1	12	-	0	24	37		0.35	
E+W.Cleddau		Compass nets	6	0	0	0	2	0	0	0	-	0	2	3	13.5	0.02	
		Seine nets	5	0	0	2	53	47	12	0	-	0	114	254	57.2	0.40	
		Coracle nets	11	0	0	16	79	84	15	4	-	0	198	422	42.3	0.43	
Dyfi		River total	16	0	0	18	132	131	27	4	-	0	312	676		0.42	
		Seine nets	4	0	0	0	28	208	65	7	-	0	308	761	46.8	1.65	
		Seine nets	1	0	0	0	0	4	1	0	-	0	5	18	36.0	0.14	
Dysynni		Seine nets	3	0	0	0	0	0	0	0	-	0	0	0	17.7	0.00	
		Seine nets	2	0	0	0	15	48	5	0	-	0	68	170	43.5	0.78	
		Seine nets	2	0	0	0	3	112	14	0	-	0	129	392	21.0	3.07	
Dwyfawr		Seine nets	1	0	0	0	1	5	0	9	-	0	15	28	73.0	0.21	
		Seine nets	2	0	0	0	0	13	21	24	-	0	58	138	48.0	0.60	
		Fish Trap	1	0	0	0	0	0	0	0	-	0	0	0	2.0	0.00	
Conwy		Seine nets	5	0	0	0	0	5	4	4	-	0	13	22	26.2	0.10	
		River Total	6	0	0	0	0	5	4	4	-	0	13	22		0.10	
		Drift nets	3	0	0	0	1	233	131	20	-	0	385	938	45.0	2.85	
Clwyd		Trammel nets	4	0	0	0	0	0	39	0	-	0	39	92	44.0	0.22	
		Seine nets	20	0	0	0	1	28	32	63	-	0	124	335	56.8	0.11	
		River total	24	0	0	0	1	28	71	63	-	0	163	427		0.12	
Whole area		Total	119	0	2	106	677	1262	494	164	-	0	2705	6589	41.4	0.55	
North West (d)		Ribble	Drift nets	6	-	-	0	0	17	5	2	-	0	24	65	50.8	0.08
			Haaf nets	26	-	-	0	56	229	161	18	-	0	464	713	56.3	0.32
	Drift nets		10	-	-	0	0	172	116	8	-	0	296	704	55.8	0.53	
	Lune	Seine net	1	-	-	0	1	90	17	1	-	0	109	172	121.0	0.90	
		River total	37	-	-	0	57	491	294	27	-	0	869	1589	57.9	0.41	
		Lave nets	8	-	-	0	0	0	15	3	-	0	18	46	33.4	0.07	
	Leven	Lave nets	6	-	-	0	0	2	3	2	-	0	7	18	44.5	0.03	
		Duddon	Seine nets	3	-	-	0	6	20	19	9	-	0	54	125	24.3	0.74
		S&W Cumbria (e)	Baulk	1													
	Eden + Esk (f)	Drift nets	4														
		Area total	5	-	-	0	0	0	6	10	-	0	16	44	47.6	0.07	
		Haaf nets	165														
	Whole area	Cribs	2														
River Total		167	-	0	8	483	1076	325	46	1	0	1939	2436	34.9	0.33		
Total		232	-	0	8	546	1606	667	99	1	0	2927	4323	38.0	0.33		

England and Wales

50903 108099

- Key:**
- (a) Northern area licences are for both drift and T nets. Not all licensees use T nets.
 - (b) Licence purchased by NRA South West region but was not used.
 - (c) Catches included under Tavy and Tamar as appropriate.
 - (d) Effort data for the NRA North West region are measured as catch per licence-fide not catch per licence-day.
 - (e) Catches are not disclosed for reasons of confidentiality and are thus amalgamated as an area total. In past years, the area total included Ellen haaf nets and/or Derwent coops, but these were not fished in 1991.
 - (f) Catch by method not disclosed for reasons of confidentiality.

Notes:

A dash is used to denote months that fall entirely within the annual close season.

Percentage return rates for all commercial fisheries can be regarded as 100% unless otherwise specified by a footnote.

Migratory trout are not caught on the Wye or Severn and these licences are not included.

Table 11 Monthly reported rod catches of salmon and grilse by principal rivers - 1991 season.

NRA Region	River	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Un-Known	Total Number	Total Weight (kg)	Catch/Lic. day
Northumbria	Aln	-	3	8	0	0	0	0	2	6	2	-	-	0	19	75	
	Coquet	-	18	23	38	48	18	11	62	49	130	-	-	27	424	1384	
	Tyne	-	13	38	38	29	55	24	25	102	336	-	-	24	682	3344	
	Wear	-	0	1	1	0	4	4	5	17	105	-	-	1	138	588	
	Tees	-	0	1	0	0	0	0	0	0	0	-	-	0	1	5	
	Total	-	34	67	77	77	77	39	94	174	573	-	-	52	1264	5386	
Yorkshire	Esk	-	-	-	1	0	1	3	0	1	5	-	-	0	11	46	0.01
Thames	Thames	-	-	-	0	0	0	0	1	0	-	-	-	0	1	3	
Southern	Test	0	0	0	1	11	23	12	8	13	4	-	-	69	141	525	
	Itchen	0	0	0	0	6	17	38	24	16	0	-	-	0	103	404	
	Total	0	0	0	1	18	40	50	32	29	4	-	-	69	244	929	
Wessex	Avon	-	11	3	5	36	49	35	29	3	-	-	-	0	171	821	
	Stour	-	1	0	0	0	0	0	0	0	-	-	-	0	1	7	
	Piddle	-	-	0	1	2	0	0	0	0	-	-	-	0	3	24	
	Frome	-	-	8	4	16	18	15	8	3	-	-	-	0	72	366	
	Total	-	12	11	10	54	67	50	37	6	-	-	-	0	247	1238	
South West	Exe	-	0	8	21	15	39	106	22	44	-	-	-	5	280	759	
	Teign	-	8	5	8	10	12	14	3	18	-	-	-	1	75	283	
	Dart	-	1	4	6	3	15	19	17	15	-	-	-	0	80	293	
	Avon	-	-	-	0	0	0	2	0	0	6	2	-	0	10	36	
	Plym	-	-	-	0	0	0	0	0	1	1	5	2	0	9	36	
	Tavy	-	-	1	0	1	3	11	6	10	17	-	-	2	51	168	
	Tamar	-	-	4	19	47	38	55	19	38	43	-	-	3	266	949	
	Lynher	-	-	0	0	1	6	4	3	5	1	-	-	1	21	67	
	Fowey	-	-	-	0	3	5	16	5	5	10	16	4	0	64	183	
	Camel	-	-	-	0	3	12	7	10	16	18	40	15	3	124	394	
	Taw	-	-	20	32	18	22	43	13	9	-	-	-	0	157	588	
	Tornidge	-	-	4	11	3	8	16	0	3	-	-	-	0	45	147	
	Lyn	-	0	3	8	12	33	13	5	14	0	-	-	0	88	288	
	Others	-	0	0	0	0	0	0	1	2	2	0	0	0	5	11	
	Total	-	7	49	105	116	193	306	104	178	98	63	21	15	1255	4202	
Severn-Trent	Severn	-	8	41	65	90	63	13	22	14	8	-	-	0	324	1839	
Welsh	Wye (a)	7	2	88	238	432	457	209	63	23	227	-	-	0	1746	8893	0.05
	Usk	3	5	7	24	40	38	42	20	34	95	-	-	8	316	1216	0.04
	Taf	-	-	0	1	2	7	10	7	3	8	-	-	0	38	138	0.05
	Ogmore	-	-	0	0	0	1	2	5	2	2	-	-	0	12	30	0.01
	Afan	-	-	0	0	0	1	5	1	4	4	-	-	0	15	34	0.02
	Neath	-	-	0	0	0	1	0	0	1	4	-	-	2	8	23	0.02
	Tawe	-	-	1	1	0	8	3	5	15	21	-	-	1	55	191	0.02
	Loughor	-	-	0	0	0	0	1	2	0	1	-	-	1	5	12	0.00
	Tywi	-	-	21	18	11	27	35	44	94	190	-	-	47	485	1815	0.02
	Ta'	-	-	3	8	8	2	4	6	9	27	-	-	0	65	232	0.02
	E+W Cleddau	-	-	2	1	4	4	5	4	5	9	-	-	0	34	98	0.01
	Neve	-	-	0	1	0	4	7	0	1	2	-	-	0	15	33	0.01
	Tech	-	-	9	22	29	33	49	38	70	159	-	-	5	414	1651	0.03
	Aeron	-	-	1	0	1	0	0	0	1	3	-	-	0	6	20	0.00
	Ystwyth	-	-	0	0	0	0	1	0	0	0	-	-	0	1	2	0.00
	Rheidol	-	-	2	1	0	1	0	3	12	5	-	-	0	24	73	0.02
	Dyfi	-	-	0	2	3	23	16	30	49	48	-	-	3	178	595	0.05
	Dysynni	-	-	1	0	1	0	0	2	4	3	-	-	0	11	30	0.01
	Mawddach	-	-	0	0	3	21	18	26	45	23	-	-	7	143	505	0.01
	Afro	-	-	0	0	0	0	0	0	1	0	-	-	0	1	3	0.00
	Dwyrhyd	-	-	0	0	0	0	4	4	4	1	-	-	2	15	44	0.04
	Glaslyn	-	-	0	1	30	4	3	6	2	2	-	-	0	48	193	0.03
	Dwyfawr	-	-	0	0	0	0	2	1	2	9	-	-	0	14	45	0.01
	Llyfni	-	-	0	0	0	0	1	2	2	2	-	-	0	7	15	0.02
	Gwyrffai	-	-	0	0	0	0	0	1	0	0	-	-	0	1	1	0.01
	Seiont	-	-	2	0	0	1	3	1	4	24	-	-	5	40	131	0.02
	Ogwen	-	-	0	0	0	6	4	12	27	42	-	-	6	99	311	0.08
	Conwy	-	-	1	3	7	32	10	50	72	71	-	-	3	249	867	0.06
	Chwyd	-	-	4	3	3	17	18	13	10	3	-	-	0	71	195	0.03
	Dee	0	6	37	17	34	59	24	35	60	100	-	-	4	378	1504	0.03
Others	0	0	0	0	1	1	3	5	1	15	-	-	6	32	92	0.00	
Total	10	13	179	339	607	748	481	388	557	1100	-	-	102	4522	18992	0.03	
North West	Ribble	-	1	8	0	5	22	9	33	87	218	-	-	0	383	1487	0.02
	Wyre	-	0	0	0	1	0	0	0	2	10	-	-	0	13	33	0.01
	Lune	-	0	9	1	1	35	40	67	469	713	-	-	0	1335	5054	0.07
	Kent	-	1	1	2	3	22	23	50	118	228	-	-	0	448	1328	0.07
	Leven	-	0	0	1	2	5	11	13	39	107	-	-	0	178	565	0.06
	Duddon	-	0	0	0	0	0	3	1	6	14	-	-	0	24	75	0.03
	Esk	-	0	0	1	0	1	0	0	13	33	-	-	0	48	211	0.14
	It	-	0	0	0	0	3	17	31	50	52	-	-	0	153	474	0.07
	Ehen	-	0	0	0	0	3	9	32	20	110	-	-	0	174	515	0.04
	Derwent	-	1	3	1	0	11	23	98	306	561	-	-	0	1004	3779	0.20
	Ellen	-	0	0	0	0	0	0	2	3	18	-	-	0	23	71	0.03
	Eden	18	8	63	51	61	116	80	173	591	605	-	-	0	1766	7165	0.09
	Esk(Border)	-	1	0	0	4	56	15	43	158	234	-	-	0	511	1908	0.16
	Others	-	0	0	0	0	2	0	9	9	28	-	-	0	46	136	0.04
	Total	18	12	84	57	77	276	230	552	1871	2929	-	-	0	6106	22601	0.07
England and Wales															13974	55536	

Key: (a) Data from fishery owner's returns, not individual catch returns, although effort data have been derived from catch returns.

Notes: A dash is used to denote months that fall entirely within the annual close season.

'Principal rivers' include all rivers supporting commercial fisheries or with mean annual rod catches in excess of 30 salmon or 100 sea trout, plus some smaller rivers selected by NRA regions. Catches from tributaries and from minor rivers with a shared estuary are included under the appropriate main river. The catch from remaining rivers in each region is aggregated and recorded under 'others'.

Table 12 Monthly reported rod catches of migratory trout by principal rivers - 1991 season.

NRA Region	River	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Un-Known	Total Number	Total Weight (kg)	Catch/Lic. day	
Northumbria	Aln	-	-	-	1	1	0	0	3	23	68	-	-	0	96	205		
	Coquet	-	-	-	10	2	23	17	11	15	112	-	-	10	200	445		
	Tyne	-	-	-	11	13	20	41	21	90	284	-	-	35	495	823		
	Wear	-	-	-	8	8	21	43	58	89	176	-	-	21	420	743		
	Total	-	-	-	28	24	64	101	91	217	620	-	-	66	1211	2216		
Yorkshire	Esk	-	-	-	1	2	10	3	1	8	78	-	-	0	103	152	0.11	
Southern	Test	-	-	-	-	5	7	1	0	4	6	-	-	135	158	146		
	Itchen	-	-	-	-	0	5	33	18	14	7	-	-	13	88	85		
	Others	-	-	-	-	2	1	8	2	4	6	-	-	31	54	122		
	Total	-	-	-	-	7	13	42	18	22	19	-	-	179	300	353		
Wessex	Avon	-	-	-	1	8	17	9	13	24	24	-	-	0	96	137		
	Stour	-	-	-	0	0	0	8	18	4	0	-	-	0	28	55		
	Piddle	-	-	-	0	0	0	0	2	1	0	-	-	0	3	4		
	Frome	-	-	-	0	1	1	4	3	1	9	-	-	0	19	45		
	Total	-	-	-	1	9	18	19	34	30	33	-	-	0	144	241		
South West	Axe	-	-	-	0	2	3	11	8	14	12	-	-	0	50	53		
	Otter	-	-	-	0	0	1	9	10	10	6	-	-	0	38	43		
	Exe	-	-	-	0	0	0	3	0	3	-	-	-	0	6	7		
	Teign	-	-	-	1	4	42	40	120	114	85	2	-	-	4	412	305	
	Dart	-	-	-	2	24	104	41	70	109	95	-	-	-	1	446	449	
	Avon	-	-	-	0	5	12	21	20	26	-	-	-	-	0	84	76	
	Erme	-	-	-	0	0	2	1	3	1	3	-	-	-	0	10	9	
	Yealm	-	-	-	0	0	0	8	35	43	8	-	-	-	0	94	79	
	Plym	-	-	-	0	2	35	72	110	109	90	-	-	-	6	424	332	
	Tavy	-	-	-	0	0	1	15	64	114	55	-	-	-	1	250	147	
	Tamar	-	-	-	0	2	11	25	76	49	18	-	-	-	2	183	111	
	Lynher	-	-	-	0	7	37	27	53	68	25	-	-	-	0	217	168	
	Looe	-	-	-	0	0	12	37	22	11	-	-	-	-	0	82	59	
	Fowey	-	-	-	4	62	67	260	117	55	-	-	-	-	5	570	355	
	Camel	-	-	-	0	20	82	237	188	31	-	-	-	-	39	595	343	
	Taw	-	-	-	0	2	16	62	84	82	38	-	-	-	1	285	309	
	Torridge	-	-	-	0	0	10	35	59	39	5	-	-	-	2	150	144	
Lyn	-	-	-	2	9	14	11	32	23	18	-	-	-	0	109	89		
Total	-	-	-	5	54	381	514	1284	1114	590	20	-	-	61	4003	3076		
Welsh	Wye	-	-	0	3	4	2	0	1	0	4	-	-	2	16	40	0.00	
	Usk	-	-	4	5	1	7	1	3	10	12	-	-	0	43	69	0.02	
	Taff	-	-	3	5	1	12	7	7	15	11	-	-	0	61	68	0.08	
	Ogmore	-	-	1	10	4	26	94	99	60	32	-	-	16	342	423	0.10	
	Afan	-	-	0	0	1	17	69	99	58	40	-	-	15	299	286	0.24	
	Neath	-	-	0	1	0	29	49	59	41	34	-	-	11	224	320	0.18	
	Tawe	-	-	0	4	10	26	54	73	74	50	-	-	8	299	342	0.11	
	Loughor	-	-	0	3	7	22	43	44	17	12	-	-	28	176	228	0.07	
	Gwendraeth	-	-	0	0	1	15	82	34	13	3	-	-	84	212	144	0.21	
	Tywi	-	-	6	41	113	462	821	694	547	242	-	-	182	3108	3550	0.11	
	Taf	-	-	1	1	3	12	25	22	24	21	-	-	1	110	125	0.04	
	E+W.Cleddau	-	-	0	1	4	53	111	60	45	28	-	-	28	348	219	0.12	
	NeVERN	-	-	0	0	0	10	47	67	33	31	-	-	0	188	112	0.15	
	Teifi	-	-	3	7	18	147	328	302	188	117	-	-	32	1140	865	0.09	
	Aeron	-	-	1	2	3	29	97	186	97	29	-	-	26	470	243	0.45	
	Ystwyth	-	-	0	0	0	0	4	3	34	32	-	-	16	89	57	0.25	
	Rheidol	-	-	0	0	0	7	18	50	39	23	-	-	0	137	105	0.14	
	Dyfi	-	-	0	5	3	160	389	335	146	63	-	-	19	1120	1559	0.30	
	Dysynni	-	-	3	7	18	18	36	46	21	17	-	-	27	189	140	0.11	
	Mawddach	-	-	0	1	4	55	90	189	167	33	-	-	69	608	547	0.08	
	Arto	-	-	0	1	2	5	19	39	18	2	-	-	15	101	58	0.15	
	Dwyrhyd	-	-	0	0	0	9	24	29	69	14	-	-	30	175	102	0.26	
	Glaslyn	-	-	3	166	97	57	81	95	67	24	-	-	41	631	395	0.21	
	Dwylawr	-	-	0	0	0	37	55	158	85	41	-	-	144	520	376	0.20	
	Llyfni	-	-	0	0	0	2	2	24	27	5	-	-	0	60	40	0.11	
	Gwyrfa	-	-	0	0	1	0	1	0	2	1	-	-	0	5	5	0.05	
	Seiont	-	-	0	0	0	6	2	14	12	7	-	-	91	132	165	0.11	
	Ogwen	-	-	0	0	0	1	9	23	21	12	-	-	4	70	55	0.09	
	Conwy	-	-	0	0	1	15	67	46	37	39	-	-	42	247	250	0.06	
	Chwyd	-	-	1	7	12	25	61	54	51	9	-	-	17	237	210	0.08	
Dee	-	-	1	2	0	9	7	9	5	1	-	-	7	41	39	0.01		
Others	-	-	1	1	4	25	37	21	16	9	-	-	55	169	147	0.08		
Total	-	-	28	273	310	1298	2708	2905	2039	996	-	-	1008	11565	11302	0.18		
North West	Ribble	-	-	-	-	23	62	162	219	110	35	-	-	0	631	583	0.03	
	Wyre	-	-	-	-	8	2	4	19	9	6	-	-	0	48	32	0.05	
	Lune	-	-	-	-	38	260	407	420	440	248	-	-	0	1813	1697	0.09	
	Kent	-	-	-	-	9	49	117	144	81	39	-	-	0	449	383	0.07	
	Leven	-	-	-	-	2	10	27	35	18	33	-	-	0	123	98	0.04	
	Duddon	-	-	-	-	0	1	6	20	11	5	-	-	0	43	28	0.06	
	Esk	-	-	-	-	0	0	12	9	8	4	-	-	0	33	65	0.09	
	Irt	-	-	-	-	0	3	16	13	15	13	-	-	0	60	67	0.03	
	Ehen	-	-	-	-	2	4	16	27	18	14	-	-	0	81	78	0.02	
	Derwent	-	-	-	-	1	13	58	33	30	22	-	-	5	157	190	0.03	
	Ellen	-	-	-	-	0	1	6	10	6	7	-	-	0	30	23	0.03	
	Eden	-	-	-	-	54	154	164	131	111	52	-	-	0	688	650	0.03	
	Esk(Border)	-	-	-	-	5	143	189	70	56	4	-	-	0	467	425	0.14	
	Others	-	-	-	-	3	3	6	2	4	1	-	-	0	19	13	0.01	
Total	-	-	-	-	143	705	1210	1152	825	485	-	-	5	4625	4332	0.05		
England and Wales															21851	21672		

Notes: A dash is used to denote months that fall entirely within the annual close season.
 'Principal rivers' include all rivers supporting commercial fisheries or with mean annual rod catches in excess of 30 salmon or 100 sea trout, plus some smaller rivers selected by NRA regions. Catches from tributaries and from minor rivers with a shared estuary are included under the appropriate main river. The catch from remaining rivers in each region is aggregated and recorded under 'others'.

Table 13 Estimated proportions of salmon and grilse in commercial and rod catches by region - 1991 season.

NRA Region	Commercial Catch					Rod Catch				
	No. Grilse	% by No. (% by wt)	No. Salmon	% by No. (% by wt)	Total	No. Grilse	% by No. (% by wt)	No. Salmon	% by No. (% by wt)	Total
Northumbria (c)										
Yorkshire (c)										
Southern (b)	31	48 (32)	33	52 (68)	64	152	62 (46)	92	38 (54)	244
Wessex (c)										
South West (c)										
Severn-Trent (d)	531	30 (18)	1216	70 (82)	1747	19	6 (3)	305	94 (97)	324
Welsh (a)	2338	77 (69)	706	23 (31)	3044	3149	70 (55)	1373	30 (45)	4522
North West (b,a)	3257	72 (56)	1242	28 (44)	4499	4530	74 (58)	1576	26 (42)	6106

Key: Full details of the methods of calculating age composition were given in the 1987 catch statistics report (Russell, I.C. and Buckley, A., 1989.)

(a) Catch data stratified. Age composition estimated from age/weight key.

(b) Catch data not stratified. Age composition derived from the mean weights of salmon and grilse in scale samples.

(c) Insufficient scale sampling undertaken in these regions to enable reliable estimation of relative proportions of salmon and grilse.

(d) Data provided by NRA Severn-Trent region and relate to R. Severn only.

Note: Data have not been included for the Anglian and Thames regions where catches are low.

Table 14 Catches of eels and freshwater fish taken in inland waters for human consumption - 1991 season. (As compiled for EIFAC).

NRA Region	Nominal commercial catch (tonnes) (a)					Nominal rod catch (tonnes) (b)					
	Eel	Elvers	Char	Shad	Zander	Brown Trout	Rainbow Trout	Eel	Shad	Pike	Zander
Northumbria	-	-	-	-	-	-	-	-	-	-	-
Yorkshire	1.18 (c)	-	-	-	-	-	-	-	-	-	-
Anglian	10.00	-	-	-	-	20.00	100.00	-	-	-	-
Thames	3.94	-	-	-	-	-	-	-	-	-	-
Southern	-	-	-	-	-	20.00	180.00	-	-	-	-
Wessex	10.40	0.11	-	-	-	-	-	-	-	-	-
South West	3.11	0.04	-	-	-	-	-	-	-	-	-
Severn-Trent	7.50	0.50	-	0.50	3.00	40.00	200.00	2.00	0.75	0.10	0.10
Welsh	1.24	0.30	-	-	-	-	-	-	-	-	-
North West	0.89	0.18	2.72	-	-	-	-	-	-	-	-
Total	38.26	1.13	2.72	0.50	3.00	80.00	480.00	2.00	0.75	0.10	0.10

Key: (a) The eel catch data are based on incomplete returns received by 5 NRA Regions (Yorkshire, Thames, South West, Welsh, and North West) and estimates for the other areas. Commercial catches of all other species have been estimated.

(b) Nominal rod catches have been derived from estimates or catch returns, which in some cases may be incomplete. The regional data for brown and rainbow trout include statistics from put-and-take fisheries which will be more accurate.

(c) Includes elvers.

Notes: The absence of data in any category is not indicative of a zero catch.

The above data are collated annually for inclusion in the European Inland Fisheries Advisory Commission National report of member countries (EIFAC, in press) and represent the best available data for England and Wales. However it is stressed that there are few statutory requirements for the collection of catch data for these species and extreme caution should be exercised in their use.

Table 15 Nominal catches of salmon in high-seas interception fisheries (tonnes round fresh weight), 1981-1991.

Year	Northern Norwegian Sea long-line fishery (north of Lat 67 deg N)	Faroese Area long-line fishery		West Greenland drift net fishery	
	Catch (a)	Catch (b)	Quota	Catch	Quota
1981	213	1125	725 (c)	1264	1265
1982	622	680	625 (c)	1077	1253
1983	404	740	625 (c)	310	1190
1984	29	700	625 (c,d)	297	870 (d)
1985	0	566	550 (c)	864 (e)	852
1986	0	530	550 (c)	960 (e)	909 (d)
1987	0	576	1790 (d,f)	966	935 (d)
1988	0	243		893	
1989	0	364	1100 (d,f)	337	2520 (d)
1990	0	315		227	
1991	0	95 (g)		438	840

Key:

(a) Catches in the N.Norwegian Sea fishery were made predominantly by Danish vessels, however Faroese vessels contributed substantially (259 tonnes) to the catch in 1982, and Finnish and Faroese vessels made smaller contributions in other years.

(b) Catches in the Faroes fishery are currently made by Faroese vessels, however a relatively small contribution was also made by Danish vessels in the period 1981-84.

(c) Quotas apply to fishing season (autumn-spring) beginning in the year stated. Catch is for calendar year.

(d) Quotas negotiated by NASCO.

(e) An additional 6-19 tonnes were also caught on the E. Greenland coast.

(f) Quotas apply to calendar years.

(g) Fishermen compensated not to fish after March 1991.

Note: All data converted from gutted weights using appropriate factors.

Acknowledgement: The data presented in this table were extracted from reports of the ICES Working Group on North Atlantic Salmon (see for example, Anon., 1992), and are cited by kind permission of ICES.

Table 16 Nominal catches of salmon and grilse in home-water fisheries (tonnes round fresh weight), 1981-1991.

Year	England and Wales												USA	Total
	Canada (a)	Wales (b)	Finland	France	Iceland	Ireland (c)	Northern Ireland (c,d)	Norway	Russia	Scotland	Sweden (West coast)			
1981	2437	493	44	20	163	685	101	1656	463	1233	26	6.0	7327	
1982	1798	286	54	20	147	993	132	1348	364	1092	25	6.4	6265	
1983	1424	429	57	16	198	1656	187	1550	507	1221	28	1.3	7274	
1984	1112	345	44	25	159	829	78	1623	593	1013	40	2.2	5863	
1985	1133	361	49	22	217	1595	98	1561	659	913	45	2.1	6655	
1986	1559	430	38	28	310	1730	109	1598	608	1271	54	1.9	7737	
1987	1784	302	49	27	222	1239	56	1385	564	922	47	1.2	6598	
1988	1311	395	34	32	396	1874	114	1076	419	882	40	0.9	6573	
1989	1139	296	52	14	278	1079	142	905	359	895	29	1.7	5190	
1990	911	338	59	15	426	586	94	930	315	624	33	2.4	4333	
1991(e)	679	200	69	13	519	422	55	885	215	462	38	0.8	3558	

Key:

(a) Includes estimates of some local sales and by-catch.

(b) Figures for England and Wales for 1981-82 must be considered as provisional pending the publication by MAFF of validated historic catch data.

(c) Catch on River Foyle allocated 50% Ireland and 50% N. Ireland.

(d) Not including angling catch (mainly grilse).

(e) Provisional figures, with the exception of those for Scotland (Scottish Office., 1992.) and England & Wales.

Acknowledgement: The data presented in this table were extracted from the 1992 report of the ICES Working Group on North Atlantic Salmon (Anon., 1992), and are cited by kind permission of ICES.

ERRATUM: RUSSIAN CATCH DATA HAVE RECENTLY BEEN AMMENDED. DATA INCLUDED IN REPORTS PRIOR TO 1989 WERE INCORRECT.

Table 17 Summary of regional salmon and grilse commercial catches, 1986-91.

NRA Region	Numbers of fish							% Change	
	1986	1987	1988	1989	1990	5-Year Mean (1986-90)	1991	'91 on '90	'91 on 5-yr mean
Northumbria	53898	33064	44679	35169	43048	41972	22525	-48	-46
Yorkshire	9527	3079	6170	6284	8482	6708	2904	-66	-57
Anglian	-	-	-	4	9	7	34	-	-
Southern	461	505	477	83	43	314	25	-42	-92
Wessex	1046	702	736	593	400	695	167	-58	-76
South West	10502	13828	11063	10091	5492	10195	2730	-50	-73
Severn-Trent	3300	2963	3511	4364	4397	3707	1747	-60	-53
Welsh	5031	4535	5010	5058	4377	4802	3044	-30	-37
North West	6682	5052	5671	7294	5579	6056	4499	-19	-26
Total	90447	63728	77317	68936	71827	74451	37675	-48	-49

Table 18 Summary of regional migratory trout commercial catches, 1986-91.

NRA Region	Numbers of fish							% Change	
	1986	1987	1988	1989	1990	5-Year Mean (1986-90)	1991	'91 on '90	'91 on 5-yr mean
Northumbria	24610	30345	32711	48626	28560	32970	24869	-13	-25
Yorkshire	23107	18994	21574	22743	15857	20455	15784	0	-23
Anglian	-	-	-	3815	2313	3064	2293	-1	-
Southern	163	327	232	170	50	188	63	+26	-67
Wessex	359	410	505	365	484	425	312	-36	-27
South West	3482	8570	4364	3591	2071	4416	1950	-6	-56
Welsh	5098	4878	6542	6400	3588	5301	2705	-25	-49
North West	5633	6032	7207	5737	3271	5576	2927	-11	-48
Total	62452	69556	73135	87632	56194	69794	50903	-9	-27

Table 19 Summary of regional salmon and grilse rod catches, 1986-91.

NRA Region	Numbers of fish							% Change	
	1986	1987	1988	1989	1990	5-Year Mean (1986-90)	1991	'91 on '90	'91 on 5-yr mean
Northumbria	1116	2269	2152	1184	1452	1635	1264	-13	-23
Yorkshire	65	70	49	11	14	42	11	-21	-74
Thames	9	5	12	8	9	9	1	-89	-88
Southern	1191	840	1052	862	485	886	244	-50	-72
Wessex	1452	924	1146	697	517	947	247	-52	-74
South West	3763	2691	4579	1868	1717	2924	1255	-27	-57
Severn-Trent	1254	929	1362	658	357	912	324	-9	-64
Welsh	8498	8202	15989	5454	5370	8703	4522	-16	-48
North West	2999	3781	6505	3986	4928	4440	6106	+24	+38
Total	20347	19711	32846	14728	14849	20496	13974	-6	-32

Table 20 Summary of regional migratory trout rod catches, 1986-91.

NRA Region	Numbers of fish							% Change	
	1986	1987	1988	1989	1990	5-Year Mean (1986-90)	1991	'91 on '90	'91 on 5-yr mean
Northumbria	1256	2237	2778	1640	1543	1891	1211	-22	-36
Yorkshire	130	299	279	97	162	193	103	-36	-47
Thames	2	4	0	5	0	2	0	-	-
Southern (a)	2517	56	1073	437	100	837	300	+200	-64
Wessex	2274	1447	837	402	101	1012	144	+43	-86
South West	5656	10898	7755	3653 (b)	2596	6112	4003	+54	-35
Welsh	21308	35727	30681	13203	10030	22190	11565	+15	-48
North West	3739	5195	6215	3481	2499	4226	4625	+85	+9
Total	36880	55863	49618	22918	17031	36462	21951	+29	-40
<p>Key:</p> <p>(a) Migratory trout returns are unreliable in the NRA Southern region. In addition data for 1986 and 1988 are believed to include significant numbers of under-sized fish which were returned to the water</p> <p>(b) Figure published in 1989 and 1990 (3645) has subsequently been found to be incorrect and has been adjusted accordingly.</p>									

Table 21 Salmon stocking - numbers of eggs, fry, parr and smolts released - 1991 season.

NRA Region	River	Tributary	Ova	Unfed Fry	Fed Fry	0+ Parr	1+ Parr	Smolts
Northumbria	Coquet		-	-	-	35000	5178	-
	Tyne	N.Tyne	-	-	-	160000	22543	-
		S.Tyne	-	-	-	50000	-	-
		Rede	-	-	-	30000	11171	-
	Wear		-	-	-	50000	5586	-
	Tees		-	-	-	50000	8329	-
	Total		-	-	-	375000	52807	-
	Value (£)		-	-	-	75000	15842	-
Yorkshire	Esk		-	50000	-	-	50000	-
	Total		-	50000	-	-	50000	-
	Value (£)		-	1500	-	-	12000	-
Thames	Thames	Main R.	-	-	-	-	-	78023
		Wey (south)	-	-	-	-	9974	-
		Wey (north)	-	-	-	-	4730	-
		Pang	-	-	-	-	7083	-
		Loddon	-	-	-	-	10743	-
		Lyde	-	-	-	-	1000	-
		Kennet	-	-	-	-	24053	-
		Lambourne	-	-	-	-	8156	-
		Enborne	-	-	-	-	4835	-
		Chess	-	-	-	-	9000	-
	Total		-	-	-	79574	78023	
	Value (£)		-	-	-	15915	93628	
Southern	Test		-	-	-	600000	-	11000
	Itchen		-	-	-	30000	-	4000
	Total		-	-	-	630000	-	15000
	Value (£)		-	-	-	21000	-	(a)
South West	Tamar	Wolf	-	-	-	10000	9098	-
	Total		-	-	-	10000	9098	-
	Value (£)		-	-	-	5000	9098	-
Severn-Trent	Severn	Camlad	-	-	7500	-	-	-
		Ledwyeh	-	-	5000	-	-	-
		Corve	-	-	5000	-	-	-
		Mule	-	-	5000	-	-	-
		Gosford	-	-	5000	-	-	-
		Vymwy	-	-	5000	-	-	-
		Eirth	-	-	5000	-	-	-
	Total		-	-	37500	-	-	-
	Value (£)		-	-	5250	-	-	
Welsh	Wye		-	26400	-	-	-	3207
	Usk		-	-	14200	-	-	8210
	Dyfi		-	-	7000	-	-	-
	Taff		-	-	-	51100	-	9512
	Clwyd		-	-	-	12500	5294	1356
	Conwy		-	-	44994	-	-	-
	Dee		-	-	-	50000	8672	4312
	Dysynni		-	-	-	8200	-	3228
	Ogmore		-	-	-	-	11200	637
	Rheidol		-	40000	-	-	-	-
	Mawddach		-	-	76600	6273	-	2520
	Seiont		-	-	15400	5937	-	-
	Total		-	66400	158194	134010	25166	32982
	Value (£)		-	8115	34802	42380	16610	36280
North West	Ribble	Main R.	-	-	116446	9326	-	-
		Hodder	-	-	141595	18323	-	-
	Calder		-	-	5000	-	-	-
	Esk		-	4000	-	-	-	-
	Annas		-	5000	-	-	-	-
	Lune	Main R.	-	247834	482650	-	-	-
		Hindburn	-	-	26131	-	-	-
		Wenning	-	-	46561	-	-	-
		Greta	-	-	136372	-	-	-
	Ehen		12000	-	41000	-	-	-
	Derwent	Main R.	-	-	137000	-	-	-
		Cocker	-	-	50000	-	-	-
	Eden	Main R.	-	-	116000	-	-	-
		Irthing	-	-	37000	-	-	-
		Eamont	-	-	20000	-	-	-
		Caldew	-	-	10000	10000	-	-
Total		12000	256834	1365755	37649	-	-	
	Value (£)		535	30537	292270	17375	-	-
England and Wales	Total		12000	373234	1561449	1186659	216645	126005

Notes: (a) Fish donated by commercial hatchery
 Values specified are estimated figures.
 1+ Parr are those stocked out on or after 1st January in the year after they hatched.

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