



NRA NORTH WEST

SUMMARY OF FISHERIES

STATISTICS 1993

NRA NORTH WEST 64

ENVIRONMENT AGENCY



128347

NOTE

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.

SUMMARY OF FISHERIES STATISTICS, 1993

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1. CATCH STATISTICS

1.1

Rod and Line - Information from Anglers' returns

1.1.1

Salmon Rod Catches by River and Month 1993

River	Undated	Feb	March	April	May	June	July	Aug	Sept	Oct	Total	Av.Weight (lb)
Border Esk (England)	9	0	1	1	0	5	15	27	65	84	207	8.00
Eden	4	17	30	26	26	47	75	217	615	368	1425	8.90
Derwent	0	2	2	1	2	6	52	153	191	255	664	8.50
Cocker	0	0	0	0	0	0	0	1	1	1	3	8.30
Ellen	0	0	0	0	0	0	0	2	1	3	6	7.00
Ehen	0	0	0	0	0	0	13	30	27	22	92	6.90
Calder	0	0	0	0	0	1	1	5	5	2	14	7.70
Irt	0	0	0	0	0	1	3	9	7	11	31	6.40
Esk	1	0	1	0	1	2	6	5	14	7	37	8.70
Duddon	0	0	0	0	0	0	2	10	5	2	19	5.30
Leven & Brathay	1	0	0	1	1	0	4	9	2	13	31	6.30
Crake	0	0	0	0	0	0	0	4	0	0	4	6.75
Kent	0	2	1	2	7	10	64	90	143	103	422	6.50
Lune	2	7	2	0	1	4	80	194	498	646	1434	7.80
Others Northern Area - (Annas, Keer, Bela-)	1	0	0	0	0	0	9	10	20	7	47	8.30
Ribble	1	2	3	2	3	9	33	103	191	261	608	8.20
Hodder	0	0	0	0	0	1	5	5	6	35	52	8.25
Wyre	0	0	0	0	0	0	0	5	6	7	18	6.35
TOTALS	19	30	40	33	41	86	362	879	1797	1827	5114	7.45

1.1.1 Salmon Rod Catches, Historical Data

River	1989		1990		1991		1992		1993	
	No.	Av.Wt(lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)
Border Esk (England)	252	8.33	342	9.54	511	8.30	332	9.50	207	8.00
Eden	1046	8.49	1522	9.41	1766	8.92	1378	8.75	1425	8.90
Derwent	941	8.41	871	8.37	1028	8.35	559	8.50	664	8.50
Cocker	27	6.94	8	9.59	37	7.01	11	8.20	3	8.30
Ellen	32	6.92	28	6.16	23	6.83	22	6.00	6	7.00
Ehen	187	6.41	100	6.90	174	6.52	191	6.90	92	6.90
Calder	48	6.78	5	7.55	39	6.49	17	6.30	14	7.70
Irt	116	6.94	38	6.66	153	6.83	74	6.30	31	6.40
Esk	11	4.91	21	5.93	48	9.70	190	8.10	37	8.70
Duddon	20	7.22	37	6.64	24	6.95	25	6.80	19	5.30
Leven and Brathay	42	6.54	73	7.66	123	7.21	118	6.70	31	6.30
Crake	34	6.28	38	6.58	55	6.51	40	6.60	4	6.75
Kent	200	5.59	289	6.97	448	6.62	408	6.50	422	6.50
Lune	683	8.15	1154	8.95	1274	8.50	860	8.70	1434	7.80
Others,Northern Area	14	5.36	11	5.69	7	6.39	3	4.00	47	8.30
Ribble	199	8.03	233	8.71	302	8.40	360	8.70	608	8.20
Hodder	69	9.30	65	8.32	81	9.13	73	9.70	52	8.25
Wyre	6	5.33	2	4.75	13	5.63	8	5.20	18	6.35
TOTALS & AV.WTS	3927	6.99	4837	7.47	6106	7.46	4669	7.30	5114	7.45

1.1.2 Migratory Trout Rod Catches by River and Month - 1993

River	Undated	May	June	July	August	September	October	Total	Average Weight (lb)
Border Esk (England)	3	21	108	144	150	24	11	461	1.50
Eden	4	19	57	107	97	270	21	575	1.50
Derwent	14	7	8	32	97	129	31	318	1.30
Cocker	0	0	0	1	2	0	0	3	2.00
Ellen	0	0	1	3	6	0	0	10	0.90
Ehen	0	0	16	28	45	17	6	112	1.30
Calder	0	0	0	0	2	0	0	2	4.40
Irt	0	0	1	6	10	14	2	33	1.60
Esk	0	1	10	6	6	33	3	59	1.30
Duddon	0	0	8	8	44	15	2	77	1.80
Leven & Brathay	0	1	4	9	11	11	3	39	1.80
Crake	0	0	3	13	14	4	6	40	1.40
Kent	6	10	36	106	155	113	25	451	1.60
Lune	5	64	145	430	342	334	154	1474	1.60
Others, Northern Area	1	0	4	21	35	21	22	104	1.40
Ribble	4	41	41	115	211	129	25	566	2.00
Hodder	0	27	19	63	88	38	9	244	2.00
Wyre	4	0	0	3	18	31	2	58	4.40
TOTALS	41	191	461	1093	1333	1183	322	4624	1.88

1.1.2 Migratory Trout Rod Catches - Historical Data

	1989		1990		1991		1992		1993	
River	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.WT (lb)
Border Esk (England)	230	1.82	133	1.91	467	2.00	544	1.8	461	1.50
Eden	677	2.13	370	2.13	666	2.15	447	2.40	575	1.50
Derwent	155	2.20	87	2.19	264	2.08	49	2.10	318	1.30
Cocker	2	0.99	2	1.75	3	1.25	1	1.30	3	2.00
Ellen	11	2.16	2	3.25	30	1.66	44	1.90	10	0.90
Ehen	104	2.11	58	2.12	81	2.13	90	2.30	112	1.30
Calder	6	2.29	-	-	13	1.52	7	2.20	2	4.40
Irt	63	2.44	37	1.81	60	2.47	30	1.50	33	1.30
Esk	21	3.17	39	2.44	33	4.31	199	2.20	59	1.30
Duddon	17	1.47	15	2.25	43	1.38	31	1.40	77	1.80
Leven	36	1.67	73	2.09	85	1.76	71	1.90	37	1.80
Crake	73	1.89	28	1.67	38	1.74	29	1.30	40	1.40
Kent	244	1.92	236	1.74	449	1.88	305	2.10	451	1.60
Lune	1083	2.11	696	2.29	1618	2.23	1039	2.20	1474	1.60
Others, Northern Area	33	2.43	10	2.25	6	1.54	14	1.20	104	1.40
Ribble	98	2.10	136	1.94	267	1.84	228	2.60	566	2.00
Hodder	282	2.28	255	2.47	364	2.18	233	2.50	244	2.0
Wyre	4	2.87	13	1.32	48	1.47	20	2.10	58	1.25
TOTALS & AV.WTS	3139	2.11	2190	2.10	4353	1.98	3381	1.94	4624	1.70

1.2 Commercial Catches by Nets and Fixed Engines

1.2.1 Commercial Salmon Catches by River/District and Month - 1993

River/District (Type of Net)	Feb	Mar	April	May	June	July	Aug	Sept	Total	Average Weight (lb)	Effort No. of Tides
Eden & Border Esk	-	10	10	27	97	460	795	494	1893	8.0	5973
Coastal Drift	-	-	-	-	-	41	209	-	250	8.01	91
South & West Cumbria Nets & Fixed Engines	-	-	-	-	-	-	-	-	-	-	-
Duddon (Draw Nets)	-	-	-	-	-	5	20	-	25	9.46	30
Leven (Lave Nets)	-	-	-	-	3	11	-	-	14	8.14	141
Kent (Lave Nets)	-	-	-	-	4	42	58	-	104	6.84	108
Lune (Draw Nets)	-	-	-	-	-	-	-	-	-	-	-
Lune (Drift Nets)	-	-	-	-	32	682	1324	-	2038	7.34	504
Lune (Heave Nets)	-	-	-	2	33	254	642	-	931	7.24	1496
Ribble (Drift Nets)	-	-	-	-	9	69	127	-	205	9.63	308

Total Catch - Nets and fixed engines	5460	8.08	8651
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1.2.1 Commercial Salmon Catches - Historical Data

	1989		1990		1991		1992		1993	
	No.	Av.Wt(lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)
Eden and Border Esk	1950	7.52	1880	9.03	1681	8.26	959	8.38	1893	8.0
Coastal Drift	816	6.81	479	8.72	195	8.13	454	7.81	250	8.01
South & West Cumbria nets and fixed engines	9	5.28	6	4.33	41	9.43	30	10.03	-	-
Duddon	21	9.08	40	6.84	17	7.74	1	9.50	25	9.46
Leven	95	6.88	53	6.45	70	6.08	8	8.25	14	8.14
Kent	357	7.11	197	9.51	185	8.26	68	7.38	104	6.84
Lune Draw Nets	62	5.25	97	8.67	65	7.88	29	7.16	-	-
Lune Drift Nets	2284	7.43	1405	7.72	1472	7.92	868	7.67	2038	7.34
Lune Heave Nets	1158	7.42	1180	8.59	567	8.12	604	8.41	931	7.24
Ribble	493	10.89	239	11.18	206	10.24	102	10.50	205	9.63
TOTALS & AV.WTS	7245	7.37	5576	8.80	4499	8.20	3123	8.51	5460	8.08

1.2.2 Commercial Catches of Migratory Trout by Nets and Fixed Engines 1993

River/District (Type of Net)	March	April	May	June	July	Aug	Sept	Total	Average Weight (lb)
Eden & Border Esk	1	3	139	971	312	18	1	1445	2.62
Coastal Drift	-	-	-	-	-	-	-	-	-
South&WestCumbria Nets&Fixed Engines	-	-	-	-	-	-	-	-	-
Duddon (Draw Nets)	-	-	-	2	21	3	-	26	2.96
Leven (Lave Nets)	-	-	-	1	5	-	-	6	4.33
Kent (Lave Nets)	-	-	-	-	-	-	-	-	-
Lune (Draw Nets)	-	-	-	-	-	-	-	-	-
Lune (Drift Nets)	-	-	4	139	93	8	-	244	5.71
Lune (Heave Nets)	-	-	9	348	218	19	-	594	3.27
Ribble (Drift Nets)	-	-	-	5	16	1	-	22	6.89

Total catch, nets and fixed engines	2337	4.30
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1.2.2 Commercial Catches of Migratory Trout - Historical Data

	1989		1990		1991		1992		1993	
	No.	Av.Wt(lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)	No.	Av.Wt (lb)
Eden and Border Esk	3847	3.08	2193	2.73	1923	2.74	1732	2.72	1445	2.62
Coastal Drift	8	4.43	2	4.13	1	5.50	-	-	-	-
South & West Cumbria nets and fixed engines	38	3.72	13	7.04	31	6.23	4	6.0	-	-
Duddon	187	3.40	3	3.66	54	5.11	25	4.08	26	2.96
Leven	50	4.01	13	4.34	7	5.78	-	-	6	4.33
Kent	80	4.32	10	5.40	18	5.68	6	3.67	-	-
Lune Draw Nets	120	3.09	23	3.83	109	3.47	28	3.54	-	-
Lune Drift Nets	187	4.78	210	5.52	296	5.24	308	5.37	244	5.71
Lune Heave Nets	1172	3.23	778	3.70	464	3.39	1064	3.55	594	3.27
Ribble	22	4.84	26	7.32	24	5.94	24	7.40	22	6.89
TOTALS & AV.WTS	5711	3.89	3271	4.67	2927	4.91	3191	4.54	2337	4.30

1.3 ANGLERS LOG BOOK RETURNS

1.3.1 NO. OF ANGLERS (1993)

	Total No. of Anglers	Number of Anglers Fishing For:	
		Salmon	Sea Trout
Annas	2	1	2
Border Esk	9	7	5
Eden	56	55	11
Derwent	70	70	40
Ehen	18	17	18
Calder	26	26	17
Irt	7	7	4
Cumbrian Esk	1	0	1
Crake	3	2	1
Duddon	1	1	0
Leven	19	19	17
Kent	50	50	42
Lune	96	89	68
Ribble	139	132	94
Wyre	3	3	1

**Total No. of Anglers fishing and completing
a Log Book = 356**

1.3.2 Salmon Angling Data

Anglers Log Book Returns 1993
Weight in lbs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	>20	N/A	Total
Annas																						0
B Esk			2		1	3	5	8	3	2	2			1		1	2					30
Eden		6	4	14	27	30	30	50	18	17	14	9	7	8	11	3	6	5	1	6		266
Derwent		2	3	11	52	68	56	43	23	18	9	14	4	5	4	5	3		1	1		322
Ehen				5	4	6	1	1	1	1												19
Calder				1	4	6	3	1		2		1		1								19
Irt					1																	1
Cumberland Esk																						0
Crake				2		1																3
Duddon						1																1
Leven			1		3	4	3	3	1				1									16
Kent		2	9	26	53	35	15	13	7	9	3	2	1		1	1						177
Lune	1	2	4	24	37	50	49	32	23	17	2	5	1	9	1	2				2	2	263
Wyre				1	1	2	1															5
Ribble		1	7	16	50	81	54	51	23	26	13	12	2	10	7	4	1	4	1	2		365

Weight Frequency Rod caught Salmon - Anglers Log Book Returns 1993

NB Includes weight of fish that were returned

SALMON - NUMBER OF HOURS FISHED

RIVER	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	TOTAL
Annas					7						7
Border Esk							6	101	32	90	229
Eden	22	182	217	353	226	125	268	553	854	511	3311
Derwent		10	18	17	42	122	490	1389	1453	1453	4994
Ehen			7	8	10	28	71	462	198	227	1011
Calder						27	134	285	194	244	884
Irt						9	22	21	56	14	122
Crake						3	4	18	1	2	28
Duddon								5			5
Leven				5	29	84	104	211	186	235	854
Kent		7	7	48	167	218	681	915	823	819	3685
Lune		21	6	63	72	69	408	858	1340	1503	4340
Ribble		16	42	186	248	416	1142	1724	1976	2337	8087
Wyre								2	19	12	33

SALMON - NUMBER CAUGHT

RIVER	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	TOTAL
Annas					0						0
Border Esk							0	7	2	21	30
Eden	1	6	6	14	12	2	8	55	105	57	266
Derwent		3	2	0	0	3	39	87	96	92	322
Ehen			0	0	0	1	3	8	5	2	19
Calder						1	2	8	4	4	19
Irt						0	0	0	1	0	1
Crake						0	0	3	0	0	3
Duddon								1			1
Leven				0	0	0	1	3	3	9	16
Kent		1	0	0	2	3	23	32	57	59	177
Lune		3	0	1	0	2	16	23	107	111	263
Ribble		0	0	0	0	1	21	50	115	178	365
Wyre								1	4	0	5

SALMON - CATCH PER UNIT EFFORT (HOUR)

RIVER	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	TOTAL
Annas											
Border Esk								.07	.06	.20	.13
Eden	.04	.03	.03	.04	.05	.02	.03	.10	.10	.10	.08
Derwent		.30	.10			.02	.08	.06	.07	.06	.06
Ehen						.03	.04	.02	.02	.01	.02
Calder						.04	.01	.03	.02	.02	.02
Irt									.02		.01
Crake								.20			.11
Duddon								.20			.20
Leven							.01	.01	.02	.04	.02
Kent		.10			.01	.01	.03	.03	.07	.07	.05
Lune		.10		.02		.03	.04	.03	.08	.07	.06
Ribble						.10	.02	.03	.05	.08	.05
Wyre								.50	.20		.15

1.3.3. Sea Trout Data

Anglers Log Book Returns 1993

Weight in lbs

	0	1	2	3	4	5	6	7	8	9	>10	Total
Annas												0
B Esk	3	2	5					1			1	12
Eden		1	6	2	1							10
Derwent	41	88	20	14	7	1						171
Ehen	14	15	11	1		1						42
Calder	1	1		1			1					4
Irt		1										1
Cumbrian Esk												0
Crake	4	3	1									8
Duddon												0
Leven	7	3	2	2	3	1	3	1				22
Kent	24	42	22	12	7	2	1	1	1			112
Lune	19	61	42	8	5	3					2	140
Ribble	14	82	72	18	13	6	5	1	2	1		214

Weight Frequency Rod caught Sea Trout - Anglers log book returns 1993

NB Includes weights of fish that were returned

SEA TROUT - NUMBER OF HOURS FISHED

RIVER	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	TOTAL
Annas	7		8				15
Border Esk	12	14	31	72	16		145
Eden	19	13	63	2	19	5	121
Derwent	37	161	123	259	184	88	852
Ehen	7	92	144	456	160	40	899
Calder		32	68	148	83	43	374
Irt		5	6	12	20		43
Cumberland Esk					3		3
Crake		5	24	17	4		50
Duddon							
Leven	25	82	99	190	171	126	693
Kent	106	353	572	726	448	171	2376
Lune	74	238	477	528	267	89	1673
Ribble	129	441	910	875	543	105	3003
Wyre					3		3

SEA TROUT - NUMBER CAUGHT

RIVER	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	TOTAL
Annas	0		0				0
Border Esk	0	3	3	5	1	0	12
Eden	0	4	1	1	4	0	10
Derwent	3	7	15	65	70	11	171
Ehen	0	1	8	30	3	0	42
Calder		0	2	2	0	0	4
Irt		0	0	0	1		1
Cumberland Esk					0		
Crake		2	2	4	0		8
Duddon							
Leven	1	0	7	0	12	2	22
Kent	2	7	24	61	14	4	112
Lune	1	13	46	40	28	12	140
Ribble	9	12	62	86	38	7	214
Wyre					0		

SEA TROUT - CATCH PER UNIT EFFORT (HOUR)

RIVER	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	TOTAL
Annas							0
Border Esk		.21	.10	.07	.06		.08
Eden		.31	.02	.50	.21		.08
Derwent	.08	.04	.12	.25	.38	.13	.20
Ehen		.01	.06	.07	.02		.05
Calder			.03	.01			.01
Irt					.05		.02
Cumberland Esk							0
Crake		.40	.08	.23			.16
Duddon							
Leven	.04		.07		.07	.02	.03
Kent	.02	.02	.04	.08	.03	.02	.05
Lune	.01	.05	.10	.08	.10	.13	.08
Ribble	.07	.03	.07	.10	.07	.07	.07
Wyre							

2. FISH CULTURE AND HATCHERY OPERATIONS

2.1 Brood fish collection

	Salmon		Sea	Trout
	Male	Female	Male	Female
Northern Area				
Border Esk system			20	21
Eden System	78	65		
West Cumbria	48	50		
South West Cumbria	9	10		
Broadrairie Trap				
Forge Weir Trap				
R. Lune				
South Cumbria Rivers			87	133
Central Area				
Ribble	37	44	10	12
Hodder	26	35		

2.2 Hatchery Operations and Salmon and Sea Trout Stocking

2.2.1 Warwick Bridge and Cockermouth Hatcheries

(Ova initially laid down at these hatcheries and then transferred at eyed stage to Holmwrangle Hatchery (Lakeland Smolt Ltd) for hatching and growing on to fed fry stage).

2.2.1.1 Numbers of ova laid down

Species	No. of Ova	Source
Salmon	-	Lowther
Salmon	58,620	Caldew
Salmon	223,620	Eden
Salmon	222,000	Derwent
Sea Trout	50,110	Border Esk
Brown Trout	4,540	Eden

Assistance was provided to Annan District salmon Fisheries Board. 19,500 Brown Trout ova were hatched and reared to fed-fry stage.

2.2.1.2

**Salmon and Sea Trout Planting
ex-Holmwrangle**

River	Fed Fry	
	Salmon	Sea Trout
Greta	50,000	---
Cocker	26,000	---
Esk	---	18,000
Derwent	74,000	---
Marron	48,000	---
Annas	---	---
Eden	148,000	----
Eamont	---	---
Lowther	32,000	---
Irthing	---	---
Caldew*	---	---
Ehen	---	---
Calder	40,500	
Waver	---	---

* 10,000 microtagged 0+ Parr

2.2.2 Middleton Hatchery

2.2.2.1 Numbers of ova laid down, 1993

Species	No. of ova	Source
Salmon	1,385,000	Lune
Salmon	50,000	S.W. Cumbria
Sea Trout	269,500	South Cumbria Rivers
Sea Trout	117,000	Lune
Sea Trout	52,000	Keer

2.2.2.2 Salmon and Sea Trout Planting
Ex-Middleton. 1993

River	Fed Salmon	Fry Sea Trout	Eyed S	Ova S/T	O+Parr Salmon
Eea		26000			
Bela					
Crake		59213+			
Keer					
Duddon		66080			
Kent		83109			
Lune		-	44,861		
Greta		-			
Wenning		-			
Hindburn		-			
Rawthey		-			
Leven		18,500			

2.2.3 Witcher Well Hatchery

2.2.3.1	Numbers of Ova laid down			
	Species	No of Ova	Source	
	Salmon	10,000	Ribble*	
	Salmon	160,000	Ribble	
	Salmon	20,000	Hodder*	
	Salmon	130,000	Hodder	
	Sea Trout	33,000	Ribble	

* These ova laid down at Witcher Well then transferred as eyed ova to Lakeland Smolt Limited for growing on to fed fry stage.

2.2.3.2 Salmon and Sea Trout Planting ex Holmwrangle 1993

River	Fed	Fry	0 + Parr
	Salmon	Sea Trout	Salmon
Mint		32000	
Keer		33400	
Kent		13600	
Crake		32350	
Lune	655750	33800	

2.2.3.3 Salmon and Sea Trout Planting ex Witcher Well - 1993

River	Fed Fry		O+Parr	O+Parr
	Salmon	Sea Trout	Salmon	Sea Trout
Ribble	-	-	19,912	-
Hodder	-	-	21,052	22,041
+ Tagged fish				53,849+

2.2.4 Salmon Planting carried out by NRA from Non-NRA Hatchery Sources

- Nil -

3. RESTOCKING WITH TROUT AND FRESHWATER FISH

3.1 Non-Migratory Trout

3.1.1 Stocking by Angling Associations and Fish Farms not excluded under Section 34 of the Salmon Act 1986.

Area	No. of Section 30 Consents Issued	Total No. Brown Trout	Total No. Rainbow Trout
Northern Area	156	39,520	409,069
Central Area	114	26,395	78,010
Southern Area	105	3,050	82,130

3.1.2 Non-migratory trout stocking carried out by NRA 1993

3.1.2.1 Northern Area

Date	Stocking Location	Brown Trout	
		Number	Size (inches)
May - Aug	40 locations relevant to Eden	18,300	5-7
	fish kill of 27/3/94	4,200	7-9
		3,036	11-13
		1,733	13 +
		703	16 +
		24,000	fry
15.9.93	R. Bela	1040	3-5
	Bela	390	7-9
	R. Bela	100	11-13
15.9.93	Peasey Beck	160	3-5
	PeaseyBeck	60	7-9
	Lupton Beck	300	3-5
	Lupton Beck	150	7-9
	Holme Beck	100	3-5

3.1.2.2. Central Area

Date	Stocking Location	Brown Trout	
		Number	Size (inches)
1993	R. Ribble Mitton Fishery	200	10-11
27.4.93	R. Lune	150	10-12
29.7.93	R. Lune	100	10-12

3.1.2.3 Southern Area

Date	Stocking Location	Brown Trout	
		Number	(Size inches)
7/3/94	Black Brook/Kings Moss	1000	4-6
	Randels Brook/Rainford	1000	"
	Thornley Brook	500	"
	R Wheelock/Warmingham	500	"
	" Elton Hall	750	"
	" Forge Mill	500	"
	Checkley Brook/Wynbury	250	"
	Bornet Brook/Bornet	100	"
	R Weaver/Capesthorne	300	"
	R Weaver/Browns Brook	200	"
	RWeaver/Kingswood Green Farm	400	"

**3.1.3 Coarse Fish Planting by NRA ex
Leyland Hatcheries and Fish Farm 1993**

3.1.3.1 Central

Species	No.
Barbel	2,000
Chub	32,956
Dace	24,130
Tench	2,295

South

Species	No.
Barbel	2,132
Chub	89,727
Dace	16,595

3.2 Freshwater Fish

3.2.1 Stocking for Angling Associations etc. 1993

Numbers stocked of each species

No. of Section 30 Consents Issued	Northern Area 52	Central Area 69	Southern Area 262
Mixed Coarse			54,360
Roach	23,635	25,675	47,320
Rudd	1,450	6,500	5,915
Bream	6,930	14,195	23,830
Chub		1,100	2,500
Carp	1,354	3,667	14,635
Crucian Carp	100	800	4,045
Grass Carp	260	145	150
Koi Carp			
Gold Carp			
Silver Carp	50		
Mirror Carp	1,135		1,701
Eels			
Tench	200	32,076	5,554
Barbel			500
Perch	150	750	7,903
Golden Orfe			200
Pike			40
Mixed Coarse		2,850	
Goldfish			
Gudgeon			1,200
Wels			20
Char			
Grayling			
Skimmer Bream			
Dace			500
Roch/Rudd Hybrid			500
Broodstock			20

3.2.2

Total number of fish transfers carried out by NRA on behalf of Angling Clubs 1993

	Northern Area	Central Area	Southern Area
No. of Transfers	None	3	19
Roach			
Rudd			
Bream			
Chub			7,000
Dace			(Chub & Dace)
Carp		50	66
Crucian Carp			
Mirror Carp			
Trout			
Tench			
Gudgeon			
Perch			
Pike			
Mixed Coarse		2,000	52,651
Grass Carp			
Barbel			
Rainbow Trout			

3.2.3

**Total number of fish rescues carried out by NRA on behalf of
Angling Clubs 1993**

	Northern Area	Central Area	Southern Area
Area Rescues	None	4*	31
Roach			
Rudd			
Bream			
Chub			
Dace			
Carp			
Mirror Carp			
Crucian Carp			
Grass Carp			
Trout			
Tench			
Gudgeon			
Perch			
Pike			
Mixed Coarse			80,113
Salmonid			

* Central - Use of aeration equipment not possible to estimate fish saved.

3.2.4 Fish Grants from NRA Stocks 1993

Area	Assoc.	Receiving Water	Source	Species	No	Size
Northern Area	-	-	-	-	-	-
Central Area	-	-	-	-	-	-
Southern Area	-	-	-	-	-	-

3.2.5 Fisheries Surveys in connection with Assessment, Improvement and Development of Fisheries 1993

Area	Electro Fishing	Netting	Biological	Water Analysis	Advisory Visit
Northern Area	10 Surveys 392 sites	2	-	2	12
Central Area	3 Surveys 122 sites.	5	-	10	14
Southern Area	172 Surveys	34		5	76

4. FISH MOVEMENT RECORDED AT AUTHORITY FISH COUNTERS 1993

4.1 River Lune

Month	Broadrairie		Forge Halton	Weir,
	Fish under 4lb	Fish over 4 lb	Fish under 4 lb	Fish over 4lb
January	0	3	0	3
February	0	0	20	7
March	1	0	5	12
April	4	2	49	34
May	6	6	242	138
June	164	33	3157	1478
July	186	39	3290	838
August	48	30	1376	1160
September	458	580	1390	1915
October	161	410	364	1077
November	1	28	471	590
December	0	214	897	1042
Total	1029	1345	11261	8294

4.2 River Kent

Month	Basinghyll 1993	
	Fish under 4lb	Fish over 4 lb
January	46	17
February	12	8
March	15	7
April	55	22
May	147	36
June	834	146
July	1342	233
August	754	232
September	742	367
October	367	185
November	423	239
December*	16	34
Total	4753	1526

* 5 days lost in December

4.3 River Derwent 1993

Month	Fish under 4lb	Fish over 4 lb
January	Not Operational	
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

4.4 River Leven, Backbarrow

Month	Fish under 4lb	Fish over 4 lb
January	2	2
February	5	1
March	7	2
April	10	3
May	89	13
June	32	11
July	307	98
August	144	51
September	225	94
October	64	33
November	268	101
December	309	60
Total	1462	469

4.5 River Ribble Catchment

	LocksWeir River Ribble	Waddow Hall River Ribble
Month	Total No. Fish	Total No. Fish
April	-	16
May	-	125
June	-	58
July	90	313
August	197	454
September	129	766
October	144	98
November	55	72
December	47	64
Total	662	1966

River Ribble Catchment (Continued)

	Winckley Hall River Hodder	Garstang River Wyre *
Month	Total No. Fish	Total No.Fish
April	-	
May	-	
June	-	
July	41	
August	133	
September	523	
October	93	
November	126	
December	248	
Total	1,164	

* Counter inaccurate counts - not recorded.

5. COUNTS OF SALMON AND SEA TROUT SPAWNING REDDS

RIVER/AREA	1989		1990		1991		1992		1993	
	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout
Eden d/s Eden Grove	-	-	-	-	-	-				
Eden d/s Eden Brow	-	-	-	-	-	-				
Eden u/s Temple Sowerby	270	-	140	100	553	-		81		
Eden d/s Temple Sowerby	96	-	-	-	8	-		-		
Eamont		312	-	-	260	-		-		
Lowther		151	202	-	161	-		-		
Irthing	16	-	24	-	-	-	No Redd	-		
Gelt	-	-	-	-	-	-	Counts -	-		
Border Esk	-	-	215	520	47	7	High	-		
Black & White Esk	-	-			-	-	River	-		
Liddell	-	-	150	287	73	16		-		
Wampool/Waver	35	-	37	23	-	-		-		

Note: In all these years high and turbid river conditions made redd counting difficult or impossible and the figures given above are undoubtedly incomplete. 1993 particularly poor weather. Only limited count possible.

RIVER/AREA	1989		1990		1991		1992		1993	
River/Area	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout
Ellen	202	15	111	199	116	40	56	-	No redd	counts
									under-	taken
Derwent	424	115	900	83	408	6	259	-	poor con-	ditions
Marron	105	67	54	127	70	-	36	-	-	-
Cocker	189	30	65	-	114	13	199	-	-	-
Greta	75	-	35	12	198	15	39	-	-	-
Ehen*										63
Keekle*	272	255	176	243	68	86	20	26	-	-
Dub Beck*				27					-	24
Calder*	58	30	67	28	17	4	64	10	29	12
Irt*	312	75	184	38	75	4	72	10	20	88
Bleng									8	3
Esk*	131	355	76	93	64	110	37	84	-	87
Mite	16	89	-	-	52	36	51	33	85	9
Annas	22	42	-	-	15	66	15	56	53	16

* High water hampered counts

RIVER/AREA	1989		1990		1991		1992		1993	
	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout	Salmon	S/Trout
Duddon	65	236	101	283	81	181	216	75	73	260
Crake	106	158	188	230	181	233*	107	180	200	319
Leven & tribs	131	237	199	386	290	321	302	44	249	855
Eea	-	257	19	211	24	284	20	183	Not	Counted
Winster	-	127	-	223	21	289	-	284	Not	Counted
Gilpin	-	167	5	190	16	305	-	350	22	153
Kent & Tribs	854	672	903	800	650	568	363	449	505	1092
Bela	28	42	52	208#	24	183	17	45	-	77
Keer	18	467	10	357	9	558	-	278	-	192
Lune	359	49	310	9	584	35	23	28	174*	15*
Rawthey	31	22	61	37	121	30	12	31	41*	6*
Dee	42	24	191	86	170	89	29	99#	73*	123*
Greta	41	77	55	24	47	46	23	63	4*	3*
Wenning	122	339	128	146	101	116	36	158	11*	13*
Other Lune tribs	55	218	78	182	9	34	8	166	170*	177*
Ribble	198	125	252	212	321	197	-	-	193*	120*
Hodder	25	18	39	140	118	189			65*	186*
Wyre	94	2	71	116	Not				Not	Floods
Conder	1	77		87	available				Counted	

* High water hampered counts

Some of these will be brown trout - fish pass completed Spring 1990

6. FISH MORTALITIES

6.1 SIGNIFICANT FISH KILLS, 1993

6.1.1 NORTHERN AREA

DATE	LOCATION	NO.	SPECIES	CAUSE
23.2.93	Overton Dyke	3	Salmon	Pollution
		50+	Eel	
		4	Trout	
		20+	Sticklebacks	
9.7.93	R Lune	88	Brown Trout	Unknown
		5	Bull Heads	
		1	Salmon Parr	
25.8.93	Kent Catchment	25	Brown Trout	Unknown
27.8.93	R Leven	1	Brown Trout	Electrocution
27.3.93	R. Eden, Ploughlands beck and d/s. 35km affected in total	27,700	Trout	Ammonia
		26,300	Salmon	based
		234	Grayling	fertilizer
		190	Chub	
		40	Dace	
		Thousands	Bullheads	
			Minnows	
			Stoneloach	
			Eels	
25.8.93	Stock Beck (Kendal)	30+	Brown Trout	Pollution
5.11.93	Trout Beck	26	Brown Trout	Pollution

6.1.2 CENTRAL AREA

DATE	LOCATION	NO.	SPECIES	CAUSE
12.3.93	Pendle Water	400	Minnow/Roach	Pollution
13.3.93	Pond Clayton Moors	278	Roach	Farm Pollution
31.3.93	Trawden Beck	151+12	Brown Trout-Roach	Caustic Soda Pollution
30.4.93	River Alt	120	Stickleback	Unknown
22.5.93	L. Liverpool Canal	20	Roach	Natural algal bloom problem
7.6.93	L. Liverpool Canal	42	Various	Algal problem
12.6.93	Pendle Water	186 + 5000	Brown Trout / Roach+Minnow	Liquid Ammonia Pollution
19.6.93	L. Liverpool Canal	25	Various	Algal problem
5.7.93	Savick Brook	30 + Fry	Eel	Sewage
21.7.93	Walton Park Lake	95	Various	Natural algal bloom problem.
2.9.93	Gerrard Drive, Brook	200 + 200	Roach / Stickleback	Pollution
11.9.93	Allied Signal, Skern	70	Roach/Rudd	Low dissolved oxygen
28.11.93	Pond- Rainford	20	Roach	Low dissolved oxygen

6.1.3 SOUTHERN AREA

DATE	LOCATION	NO.	SPECIES	CAUSE
14.4.93	Doe Hay Brook Bolton	1010	Roach	Pollution
		2	Bream	
15.4.93	Top Reservoir Doe Hey	1000	Roach	Pollution
		30	Sticklebacks	
		2	Carp	
26.4.93	Trent & Mersey Canal Chelford	37	Roach	BWB driving
		15	Sticklebacks	shuttering into canal bed
4.5.93	Birkenhead Park	24	Perch	Not Known
		3	Tench	
7.5.93	R Gowy Bridge Trafford	44	Brown Trout	Pollution
		3	Chub	
		1	Dace	
10.5.93	Rochdale Canal	32	Roach	Not Known
		8	Perch	
25.5.93	Monarch Mill Lodge Royton	410	Roach	Fungus
		60	Bream	
29.5.93	Kirklees Brook	1652	Bullhead Fry	Pollution
		546	Bullheads	
		1	Gudgeon	
		1	Brown Trout	
		1	Stoneloach	
29.5.93	Shropshire Union Canal	1500	Roach/Bream/ Perch fry	Low D.O.
		500	Roach/Bream/ Perch	
28.5.93	Shropshire Union Canal	200	Roch/Perch/ Carp/Bream	Not Known
8.6.93	Chew Brook Greenfield	27	Brown Trout	Pollution
		22	Stoneloach	
		9	Bullheads	
8.6.93	Rochdale Canal Bolton	4	Carp	Spawning fatalities
		12	Roach	
		5	Perch	
10.6.93	Blackenhall Farm	20	Brown Trout	High water temperature
12.6.93	Trent & Mersey Canal Hassal Green	27	Gudgeon	Not Known
		3	Roach	
		1	Stickleback	

6.1.3 SOUTHERN AREA (continued)

DATE	LOCATION	NO.	SPECIES	CAUSE
13.6.93	Ingersley Pool Bollington	27	Bream	Low D.O.
		14	Carp	
		50	Roach	
		100	Perch	
13.6.93	Trent & Mersey Canal	67	Roach/Gudgeon	Not Known
			/Perch	
14.6.93	Leeds Liverpool Canal	31	Bream	Algal Bloom
		13	Tench	
		11	Carp	
28.6.93	Bentley Heath Lane Pools	22	Carp	Not known
29.6.93	Rode Pool Sandbach	7	Tench	Pollution
		30	Bream	
2.7.93	Swallow Dale Farm pool	100+	Bream	Not Known
5.7.93	Trent & Mersey Canal	2430	Gudgeon/Roach	Pollution
			/Perch	
6.7.93	Trent & Mersey Canal	2500	Roach	Collapsed D.O.
		3000	Gudgeon/Perch	levels
13.7.93	Glossop Brook	107	Brown Trout	Pollution
		1	Roach	
		1	Gudgeon	
24.8.93	GlazeBrookd/sPenningtonFlash	30	Roach/	Not Known
			Sticklebacks	
25.8.93	R Sett above Heyfield	38	Brown Trout	Discharge from Severnt Trent WTW
9.9.93	R Dane Northwich	2000	Mixed coarse fry	Cattle slurry
10.9.93	R Dane Northwich/Weaver	211	Chub	Cattle slurry
29.10.93	Hollins Brook Bury	23	Sticklebacks	Pollution

7. **DETAILS OF FISHERIES PROSECUTIONS 1993**
(SALMON AND FRESHWATER FISHERIES ACT 1975)

OFFENCE	SECTION	NO. OF CHARGES	DIS MISSED	WITH D/NS	COND DIS	ABS DIS	FINES £	COSTS £	COMMENTS
Prohibited Implement	1	10	-	-	2	-	200.00	165.00	1 x 1 month Imprisonment. 4 x 120 Hrs. Community Service Order
Fixed Engine	6	5	-	-	-	-	675.00	192.50	
Close Season Trout	19 (4)	2	-	-	-	-	20.00	48.00	1 x no separate penalty
Freshwater fish	(6)	25	-	-	-	1	1159.00	464.00	
Unlicensed instrument	27								
hands		1	-	-	-	-	20.00	30.00	1 x 3 month Imprisonment
net		4	-	-	-	-	180.00	37.50	1 x offered no evidence.
rod		594	3	52	18	15	33052.50	16855.50	
fish trap		1	-	-	-	1	-	-	
hand line		1	1	-	-	-	-	-	
Introducing fish	30	6	-	-	-	-	721.00	192.50	
Obstruction	31	9	1	-	1	1	484.00	214.50	
Failing to prod/to state	35	121	-	10	3	5	4088.50	2594.00	
TOTAL		779	5	62	24	23	40,600.00	20,793.50	

FISHERY BYELAWS

OFFENCE	BYELAW	NO. OF CHARGES	DIS MISSED	WITH D/NS	COND DIS	ABS DIS	FINES £	COSTS £	COMMENTS
	12(vii)	-	-	-	-	-	-	-	
	12(x)	2	-	-	-	-	500	1000	
	13(v)	-	-	-	-	-	-	-	
	18(i)	35	-	1	-	1	1345	834	
	18(ii)	7	-	--	-	-	162	129.50	
	19	1	-	-	-	-	-	20	No separate penalty
	20	5	-	-	-	-	173	84.50	
	22	1	-	-	-	-	35	35	
	23	-	-	-	-	-	-	-	
	28	3	-	-	-	-	70	90	

MISCELLANEOUS LEGISLATION

OFFENCE	ACT	NO. OF CHARGES	DIS MISSED	WITH D/NS	COND DIS	ABS DIS	FINES £	COSTS £	COMMENTS
Angling in private waters	Theft Act 1968	1	-	-	-	1	-	45	
Salmon handling	Salmon Act 1986	3	-	-	-	-	222	87.50	
Threatening behaviour	Public Order Act 1986	4	1	1	-	-	30	17.50	1 x bound over to keep peace.
Obstruction	Police Act 1964	12	-	1	1	-	2085	658.50	

8. NUMBERS OF ROD AND COMMERCIAL FISHING LICENCES ISSUED 1993

8.1 Rod and Line

Whole Area	No	Duty £	Amount £
Full	64208	13.25	850,756.00
Concession	24254	6.75	163,714.50
7 Day	2030	6.75	13,702.50
Totals	90492		1,028,173.00

8.2 Instruments Other Than Rod and Line

Northern Area

	No	Duty £	Amount (incl. endorsees) £
Whole area - Haaf nets	165	58.00	9570.00
R.Eden District -Coops	2	257.00	514.00
South West Cumbria - Garth	-	287.00	-
Public Waters within jurisdiction - Drift nets	4	288.00	1154.60
Lune Estuary			
- Drift or Hang nets	10	288.00	2884.60
- Draw or Seine Nets	-	248.00	-
- Heave or Haaf Nets	26	100.00	2600.00
Duddon Estuary			
- Draw or Seine Nets	1	248.00	248.00
Kent Estuary - Lave Nets	8	100.00	800.00
Leven Estuary - Lave Nets	6	100.00	600.00
Derwent Coop	-	576.00	-
Central Area			
Ribble Estuary			
- Drift or Hang Nets	6	177.00	1064.40
Totals	228		19435.60

Eel Fishing Licences - Whole Area

	Duty £	Licences	No. of Nets	Amount £
Fyke Nets	5.50 per net	10	170	935.00
Traps/Putcheons/ Baskets	16.60 per 25 or part thereof	1	25	16.60
Dip nets	11.00 per net	19	19	209.00
Fixed eel traps	51.00 per trap	-	-	-
	TOTAL	30	214	1160.60

8.3 Numbers of Persons Engaged in Commercial Salmon and Trout Fishing

Type of Net, Etc

	Haaf	Drift	Draw	Lave	Fixed Engine
Northern Area					
Licence Holders	165	4	1	8	2
Endorsees	-	13	5	-	-
Central Area					
Licence Holders	-	16	-	6	-
Endorsees	-	41	-	-	-

8.4 General Licences

Number issued = 6

Total value = £425.95

8.5 Temporary Licences (Rod and Line)

Number issued = 24

Total value = £490.00