

EA - SOUTH WEST BOX 18



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SOUTH WEST REGION

FISHERIES TECHNICAL REPORT

RIVER DART  
NET LIMITATION ORDER REVIEW

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FRCN/02/03

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**River Dart Net Limitation Order Review 2002**

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## 1.0 Introduction

- 1.1 The net fishery for salmon and sea trout on the River Dart is regulated by a Net Limitation Order (NLO) and byelaws. The current NLO limits the number of nets to a maximum of fifteen. It expires on 25 February 2003.
- 1.2 When the current NLO was confirmed by the Minister in February 2000, he asked the Agency to consider the need for additional measures to reduce exploitation of the River Dart salmon stock. We have now updated our stock assessment, and taken account of the effect of new national byelaws, reductions in fishing effort and catch and release.
- 1.3 The main improvement in our stock assessment has been the estimation of annual rod exploitation rates for spawning target compliance assessment. This has resulted in a significant change in the performance of the River Dart salmon stock over the last ten years.
- 1.4 Proposals are made for the future management of the Dart salmon fishery.

## 2.0 Net catches

- 2.1 The number of nets operating remained at 18 for most of the period 1951 to 1994 (the exceptions were 15 nets in 1970 and 17 nets in 1972). Since 1994 the take-up of licences has reduced (to 16 in 1995, 13 in 1996, 15 in 1997, 14 in 1998 and 13 in 1999). Since the NLO was renewed in 2000 at a reduced level of 15, the take up has been 11 in both 2000 and 2001, and 13 in 2002.
- 2.2 A national byelaw which prohibited netting for salmon before 1 June was introduced in 1999. An exemption for the River Dart allowed netsmen to continue to fish for sea trout prior to 1 June, but any salmon caught have to be returned.
- 2.3 Information on netting effort has been collected since 1997. Total annual netting effort reduced from an average of over 750 days in 1997 and 1998 to less than 500 days from 1999 to 2001.

Year	Days pre June 1st	Days post June 1st	Total days fished
1997	298	458	756
1998	255	510	765
1999	173	339	512
2000	128	306	434
2001	136	351	487

- 2.4 Annual salmon catches for the period 1953 to 2001 are presented in Figure 1, split into numbers caught before and after 1 June. Fish caught before 1 June represent the multi-sea winter (MSW) 'spring salmon' component of the stock, whereas fish caught later in the season are a mixture of MSW salmon and 'grilse' (one sea winter fish).

- 2.5 The total season catch peaked in the late 1980s at over 2000 fish and has declined steadily to below 200 fish in recent years.
- 2.6 Catches of spring salmon have shown a long term decline from over 500 fish in the 1950s to less than 50 fish in recent years. Catches in 1997 and 1998 were the lowest on record at 29 and 20 salmon respectively. It should be noted that catches of spring fish from 1999 onwards have been severely restricted by the national byelaw, which requires the release of any salmon caught before 1 June.
- 2.7 Catches now consist almost exclusively of fish caught after 1 June, and catches of this stock component have also reduced markedly.
- 2.8 Annual sea trout catches for the period 1953 to 2001 are presented in Figure 2. Over this period total season catches have been highly variable, with no clear trend. Catches were at their highest levels in the 1980s (peaking at over 900 fish), and have been generally lower in the 1990s.
- 3.0 Rod catches**
- 3.1 Annual salmon catches for the period 1966 to 2001 are presented in Figure 3, split into numbers caught before and after 1 June. Fish caught before 1 June represent the multi-sea winter (MSW) 'spring salmon' component of the stock, whereas fish caught later in the season are a mixture of MSW salmon and 'grilse' (one sea winter fish).
- 3.2 Over the period, total season catches have been highly variable, with no clear long term trend. Good catches were recorded in the late 1960s and the late 1980s, peaking at over 450 fish. Catches have averaged around 150 fish in the 1990s, with a peak of over 300 in 1994.
- 3.3 Catches of salmon before 1 June have shown a long term decline from about 200 fish in the late 1960s to less than 50 fish in recent years. Catches in 1997 and 1998 were amongst the lowest on record at 11 and 13 salmon respectively. Since the introduction in 1999 of national byelaws which require the release of all rod caught salmon prior to 16 June, catches have remained at very low levels.
- 3.4 Rod fishing effort has been recorded on statutory catch returns since 1993. Estimated annual fishing effort for salmon and sea trout combined is presented in Peress (2002), together with the corrected salmon catch and catch per unit effort (CPUE) for salmon. It may be seen that fishing effort has reduced over the period from around 6000 days per year to just over 2000 days per year. The reduction in effort from 1999 onwards is probably related to the introduction of the national salmon byelaws. Despite the reduction in effort, CPUE for salmon has remained relatively constant over the period, within the range 0.033 to 0.068 salmon per day, and with no indication of a trend.
- 3.5 The proportion of salmon voluntarily released after capture by the rods has been increasing steadily since 1996. In both 2000 and 2001, over 50% of the salmon caught were returned to the river. Although this includes the spring salmon, which must be released, the majority of fish were released voluntarily. Significant numbers of sea trout are also released by the rods. In 2001, 232 sea trout were returned from a catch of 782 (30%).

3.6 The estimated rod exploitation rate (in terms of the number of fish killed) has reduced from around 30% to less than 10% over the period 1992 to 2001 (Peress, 2002). However, the exploitation rate of 3.3% in 2001 is artificially low due to the impact of Foot and Mouth restrictions on angling effort.

3.7 Annual sea trout catches for the period 1966 to 2001 are presented in Figure 4. Over this period total season catches have been highly variable. Good catches in the 1960s were followed by a period of very low catches in the 1970s. Catches have recovered steadily since the mid-1970s, and are currently at levels similar to those of the 1960s, averaging close to 1000 fish.

#### **4.0 Compliance with salmon spawning targets**

4.1 Salmon spawning targets have been set for each salmon river in England and Wales according to guidelines developed by the Environment Agency (Environment Agency, 1998). For the River Dart, the target is 294 eggs/100m<sup>2</sup> of accessible stream area, which equates to 4.0 million eggs (Peress, 2000).

4.2 Compliance with spawning targets was assessed for the period 1964 to 1998 according to the above guidelines (Peress, 1998). Subsequently, marine survival and rod exploitation rates have been reassessed, and the current assessment of target compliance is presented in Peress (2002). The salmon spawning target has not been met during the period 1992 to 2001, and egg deposition remains at around 50% of target level.

#### **5.0 Juvenile distribution and abundance**

5.1 Analysis of juvenile survey data Peress (1999) indicated that densities of both salmon fry (0+) and salmon parr (>0+) were significantly higher in 1987 than in 1993 or 1996. This suggested that juvenile populations were below carrying capacity in the latter years, which would be consistent with the failure to meet the spawning target since 1988.

5.2 The most recent survey (in 1999) indicates that overall juvenile populations remain similar to the levels recorded in 1993 and 1996, and populations of both fry and parr appear to remain below carrying capacity (Appendix 1).

5.3 Semi-quantitative survey data for main river sites indicate a steady improvement in salmon fry populations over the period 1993 to 1999, which suggests that spawning success in the main river has increased in recent years. Salmon parr populations in the main river, however, have remained relatively stable over the period. The survey data are presented in Appendix 2.

#### **6.0 Fishery status**

6.1 It is clear from the information presented above that the salmon stock of the River Dart is giving cause for concern. There has been a long-term decline in the spring-running component (Broad, 1995), which has continued to date, with both rod and net catches at all time low levels.

- 6.2 The current minimal contribution by spring fish to total egg deposition accounts largely for the current failure to meet the spawning target. In the late 1980s increased numbers of later running fish compensated for the lack of spring fish in terms of overall egg deposition, such that the spawning target was met for a few years. However, a decline in the later running fish through the 1990s removed this compensatory effect.
- 6.3 In recent years, estimated egg deposition has remained at approximately 50% of target level, despite significant reductions in rod and net exploitation rates. This appears to have been due primarily to a marked reduction in marine survival.
- 6.4 Catch per unit effort (CPUE) data for the rod fishery suggest that the stock available to the rods has remained relatively constant since 1993. This is consistent with the egg deposition estimates.
- 6.5 The sea trout stock appears to be in a better state than the salmon stock. There is some evidence of a decline in net catches since the late eighties, but this would be consistent with the reduction in effort. Rod catches have increased over the same period, and there may have been an associated increase in sea trout fishing effort.

## 7.0 Management options

- 7.1 The recent introduction of a package of national byelaws to protect spring salmon stocks has reduced the number of fish which are taken by the rods and nets on the River Dart.
- 7.2 There has also been a systematic reduction in net catches and netting effort in recent years, and the estimated exploitation rate has decreased from around 40% in the early 1990s to less than 10% in 2001. This may be explained by the gradual decline in the number of net licences taken out, together with a reduction in the number of days fished per net. The CPUE for the nets over the period 1997 to 2001 has averaged 0.35 salmon per day and 0.83 sea trout per day. At these levels the fishery is unlikely to be economically viable, which may explain why effort has reduced.
- 7.3 Estimated rod exploitation rates (in terms of the number of fish killed) have fallen since 1992 from around 30% to less than 10% in 1999 and 2000. This trend has been due largely to the introduction of voluntary restrictions, club rules and the increasing practice of catch and release.
- 7.4 Despite such significant reductions in both net and rod exploitation rates, the River Dart salmon stock continues to fail to meet the spawning target. The main reason for this would appear to be a reduction in marine survival over the last ten years to a current level estimated at approximately 7%. At this level the numbers of adults returning to the river are not sufficient to meet the spawning target, even in the absence of exploitation.
- 7.5 Current levels of exploitation by both nets and rods are estimated to be at all time low levels and catches are now so low that any increase in the spawning escapement that can be achieved through further exploitation controls is marginal. Nevertheless, the current stock assessment indicates that the situation is so serious that further

reductions in catches will be necessary to allow the stock to recover towards target level.

- 7.6 The number of salmon killed by the rod fishery has fallen to a very low level (50 fish in the 2000 season) and we are confident that voluntary restraint will be maintained at or in excess of the current level. The main angling associations have agreed to continue to review and tighten their club rules where appropriate to limit the numbers of salmon caught and killed. Currently there are mandatory daily and season bag limits, and recommendations for catch and release, particularly for larger fish. There are also method restrictions, and worm fishing is banned completely. Peer pressure is thought to be an important factor influencing the effectiveness of the voluntary measures. Copies of the Dart Fisheries Association Regulations and the Dart Angling Association Regulations are presented in Appendix 3.
- 7.7 Net catches have been below 200 salmon in each of the last three years, due largely to declining runs of fish, and the consequent reduction in fishing effort in response to the reducing viability of the fishery. While this indicates that the fishery is largely self regulating, catches of sea trout remain worthwhile, sustaining the overall fishery at the current level. Measures are required to reduce the salmon net catches even further, if possible without compromising the viability of the sea trout fishery. It is likely that further byelaws will be necessary to achieve this, and we consider that the most expedient approach is to review the local position on the Dart concurrently with the formal 'mid-term' review of the national salmon byelaws, due to take place in 2003. An appropriate package of national and local measures would then apply to the Dart, probably from 2004 onwards.
- 7.8 The review of the national byelaws will clearly also include the rod fishery, and if at this stage it is felt that further mandatory measures are necessary, they will be included as part of the package.
- 7.9 In the meantime it is important that a new NLO should be introduced in order to cap the number of nets at the current level of take up, and thus help to prevent exploitation increasing again before the salmon stock has recovered. Thirteen licences were issued in 2002, and it is proposed that a new NLO should be introduced at this level.
- 7.10 It is currently our long term intention to further reduce the number of the NLO on the Dart, as this would result in a more sustainable fishery at current stock levels. To facilitate this we would propose that the new NLO should be for a maximum duration of three years. This would allow time for the public consultation which will be necessary in connection with the proposal for a reducing NLO.
- 7.11 A programme of habitat improvements is in progress on the River Dart system. This includes gravel rehabilitation schemes, bankside habitat restoration and fish pass construction. The programme is aimed at increasing the productivity of the Dart system and hence the numbers of adult salmon returning to spawn.

## **8.0 Consultation**

- 8.1 Consultation with rod and net fisheries interests has been ongoing throughout the development of these proposals.
- 8.2 The advice of the Agency's Regional Fisheries Ecology and Recreation Advisory Committee (RFERAC) has been taken throughout the consultation process.

## **9.0 Agency proposals**

- 9.1 The proposed management approach is to maintain rod and net exploitation rates at or below current levels in the short term, and to further reduce exploitation rates in the medium and long term.
- 9.2 It is proposed that the River Dart NLO should be renewed at the reduced level of 13 nets, to run for a period of three years from 2003.
- 9.3 Continued voluntary restraint by the rods will be encouraged through the tightening of angling association regulations.
- 9.4 The need for local byelaws to further reduce exploitation will be assessed in association with the mid-term review of the national salmon byelaws in 2003. An appropriate package of net and rod fishing byelaws would then be proposed for 2004 onwards.
- 9.5 Proposals for a reducing NLO will be made in 2003, as a long term measure to reduce the number of nets to a sustainable level.



## 10.0 References

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Steel, S., 1997. River Dart fisheries survey 1996. Environment Agency Report DEV/FRCN/10/97

Figure 1. Salmon catches - River Dart Nets

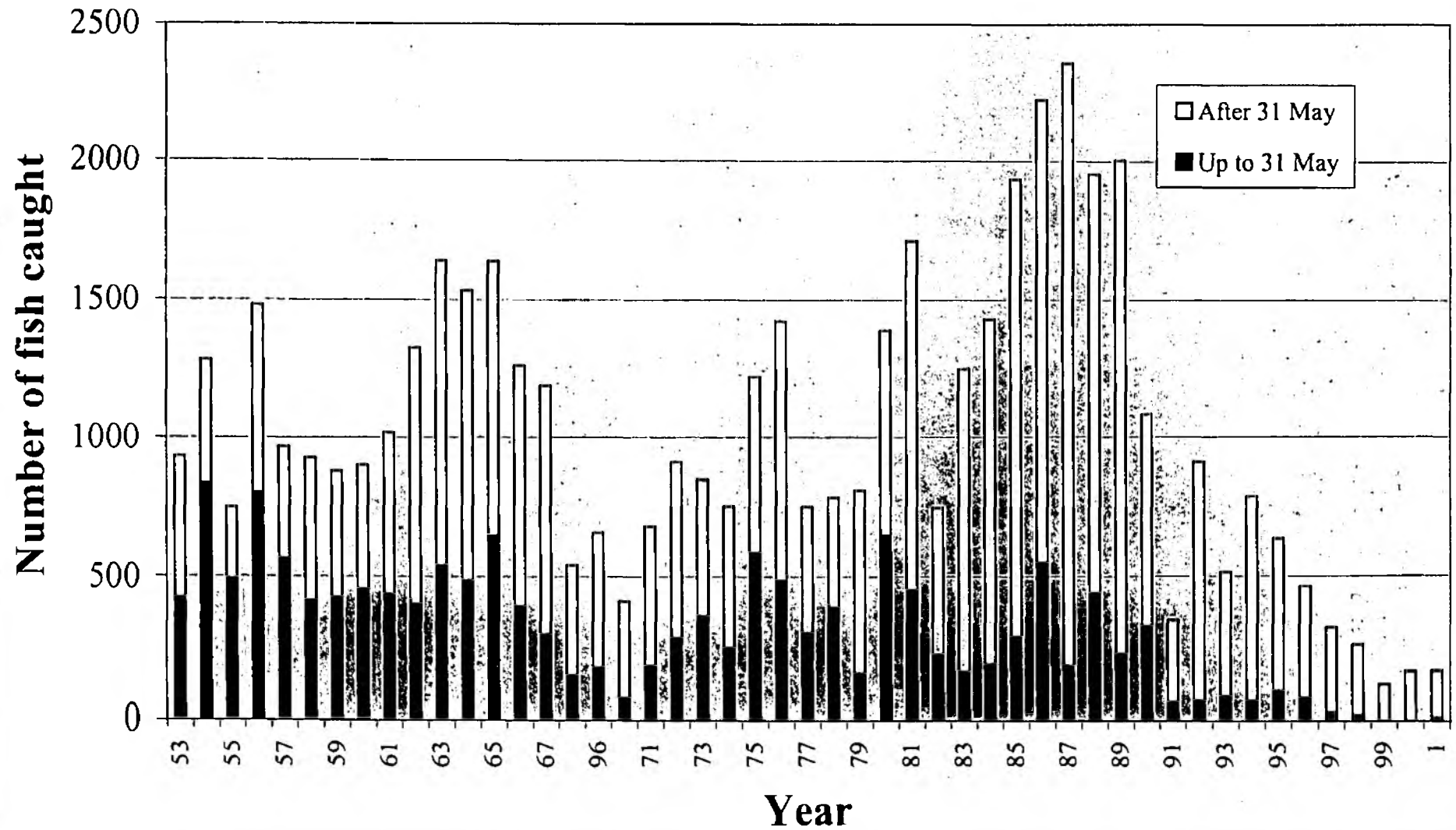
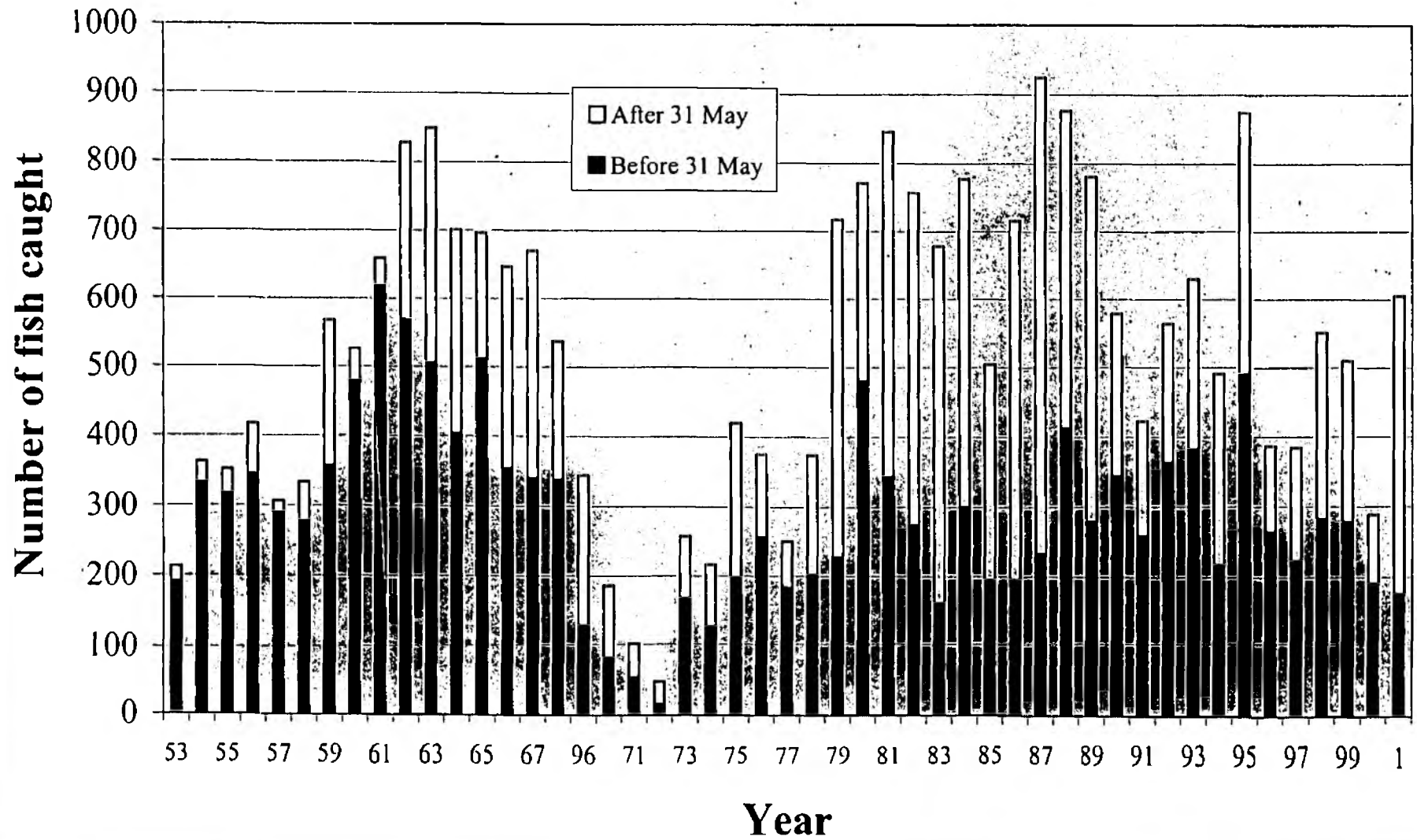


Figure 2. Sea Trout catches - River Dart Nets



**Figure 3. Salmon catches - River Dart Rods**

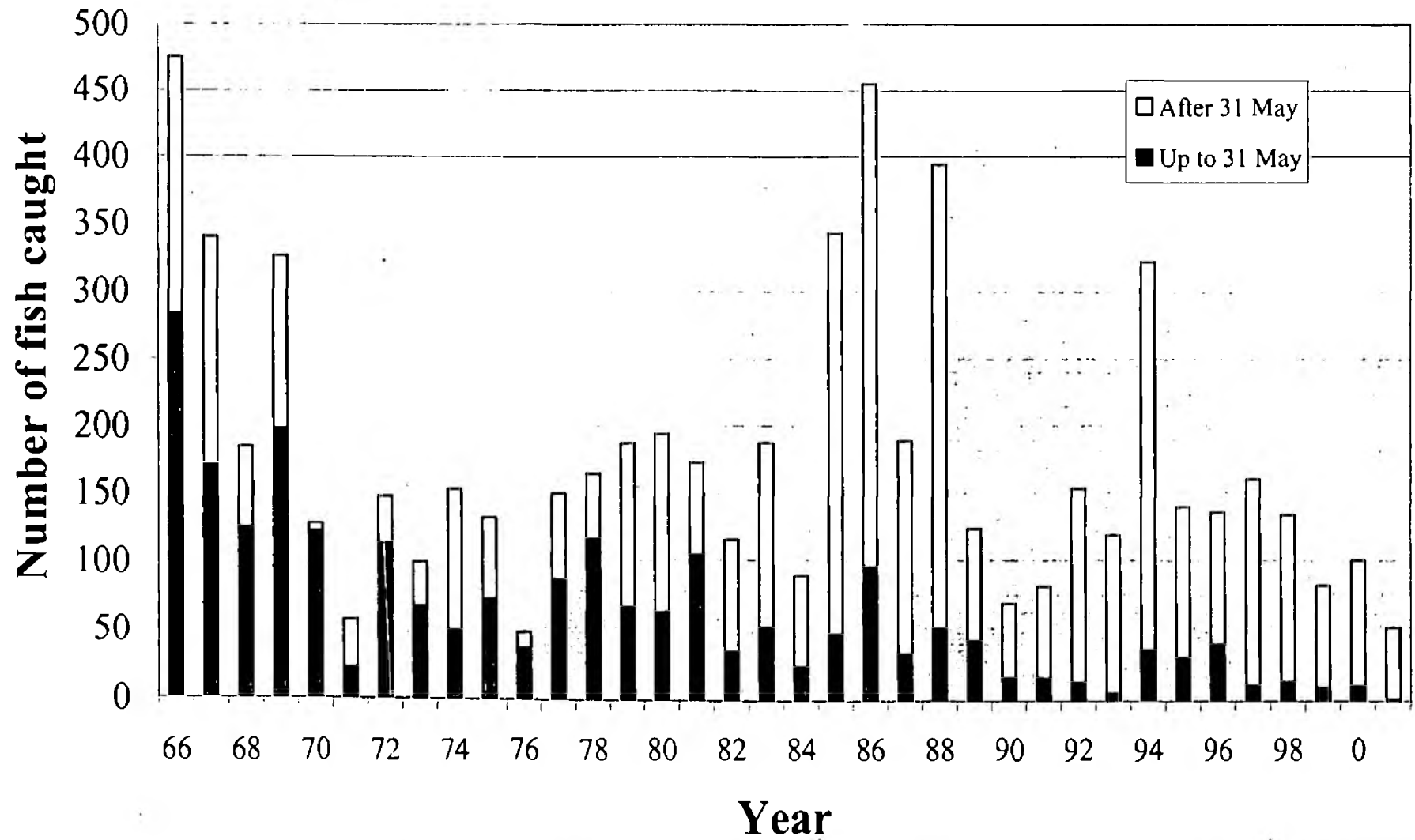
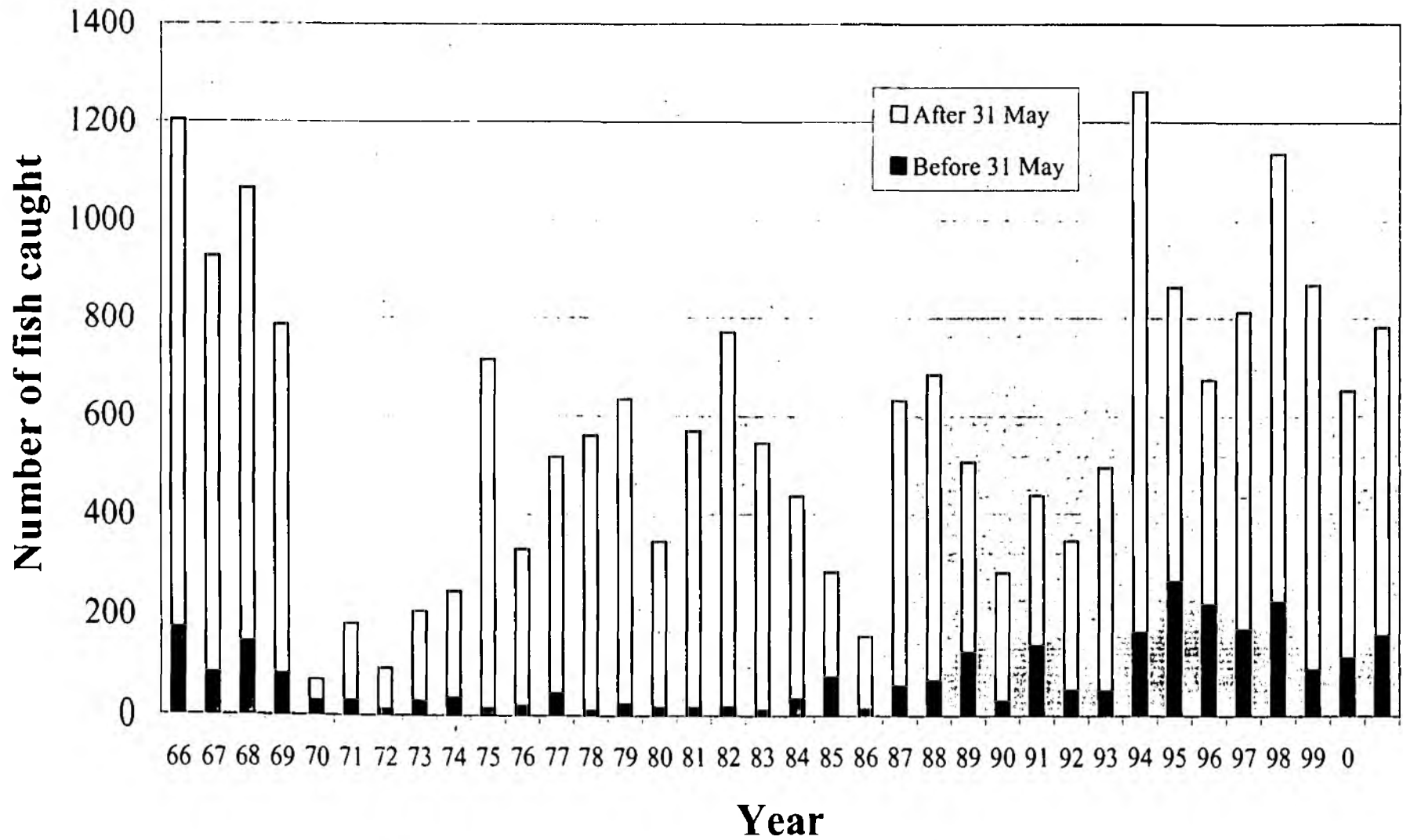


Figure 4. Sea Trout catches - River Dart Rods



Appendix 1.

River Dart - Analysis of estimated average densities of juvenile salmon.

- *Stock assessment review on the River Dart* report's (FRCN / 99/07) update includes the analysis of 1999 juvenile survey data. The method to compare salmon population abundance between years remains the same. A Friedmann test is performed on the following data set for 1987, 1993, 1996 and 1999 for both age classes.
- This test shows that for both fry and parr there is a significant difference in estimated densities between the examined years (fry  $P < 5\%$  and parr  $P < 5\%$ ). The juvenile salmon population seems to have reached a maximum in 1987, which has not reoccurred in 1999.

## Appendix 1 (cont)

## RIVER DART – SALMON JUVENILE SURVEY –BALANCED DATA SET

SITE	FRY SALMON				PARR SALMON			
	1987	1993	1996	1999	1987	1993	1996	1999
1	28.92	1.02	2.64	23.84	29.02	12.29	15.17	6.74
2	204.35	76.50	85.46	162.22	37.61	8.39	32.56	14.83
3	67.80	21.29	14.54	0	5.29	1.28	12.18	10.76
4	220.35	145.13	183.16	247.6	13.61	10.83	34.66	33.27
5	12.01	3.85	1.25	0	17.83	5.23	4.37	6.01
6	6.54	2.94	3.52	2.38	1.60	2.94	2.69	5.58
7	0.00	0.00	0.00	0	1.48	0.00	0.52	8.98
8	77.49	11.54	21.76	5.63	23.11	35.58	15.06	37.89
9	0.00	67.99	15.66	35.31	7.18	22.62	13.50	7.63
10	114.61	35.92	182.00	57.2	19.88	17.47	15.87	9.23
11	49.60	1.66	1.64	18.7	19.75	8.91	8.15	11.89
12	12.49	8.48	0.00	0	14.32	4.43	14.81	22.16
13	0.00	0.00	0.00	0	0.00	0.00	0.00	0
14	319.63	150.00	10.37	35.02	42.79	16.67	14.24	12.08
15	4.79	1.51	3.20	4.34	20.76	10.83	12.10	5.44
16	41.60	88.69	41.42	50.56	8.88	12.93	10.80	9.97
17	8.20	3.15	2.17	4.31	24.39	9.17	9.14	15.96
18	0.00	0.00	0.00	0	10.07	4.25	0.77	0
19	26.45	12.54	0.00	0.85	25.11	4.52	1.50	1.46
20	4.04	0.00	0.00	0	0.00	0.00	2.38	0
21	0.00	0.00	0.00	3.79	0.43	0.00	0.00	2.71
22	6.37	0.00	0.00	0	1.46	0.00	0.00	0
23	0.00	0.00	0.00	0	0.00	0.00	0.00	0
24	0.00	0.00	0.63	0	4.11	1.88	2.67	3.53
25	0.84	1.27	0.00	0	7.30	2.80	1.40	3.6
26	0.00	0.00	0.00	0	19.16	3.94	1.98	5.67
27	0.00	0.00	0.00	0	0.00	0.00	0.00	0
28	10.15	0.00	1.25	5.05	6.54	0.26	1.91	7.41
29	6.54	0.00	0.67	0	3.73	0.00	1.09	0.82
30	0.00	0.00	0.41	0.48	0.42	0.00	0.00	0.48
31	0.00	0.00	0.00	0	0.00	0.00	0.00	0
32	0.00	0.00	0.00	0	0.00	0.00	0.00	0
33	0.00	0.00	0.00	0	0.00	0.00	0.00	0
34	0.00	0.00	0.00	0	0.00	0.65	0.00	0
35	0.00	0.00	0.00	0	0.00	0.00	0.00	0
average	34.94	18.10	16.34	18.78	10.45	5.65	6.56	6.97
Stand. Dev.	72.73	39.33	44.53	49.89	11.77	7.96	8.88	9.07
confidence at 5 %	24.10	13.03	14.75	16.53	3.90	2.64	2.94	3.01

Appendix 2.

Electric fishing survey data for juvenile salmon on the River Dart, 1965 to 1999.



## RIVER DART SEMI-QUANTITATIVE SURVEY RESULTS 1993-1999

<u>WATERCOURSE</u>	<u>SITE NAME</u>	<u>NGR</u>	<u>No. Salmon fry</u>			<u>No. Salmon parr</u>		
			<u>1993</u>	<u>1996</u>	<u>1999</u>	<u>1993</u>	<u>1996</u>	<u>1999</u>
EAST DART	Bellevier	SX 658 773	42	95	196	10	30	22
	U/s Badgers Holt Cafe	SX 673 735	5	1	46	18	10	36
	D/s Dartmeet Bridge	SX 672 731	37	44	114	20	32	26
DART	Hannafor	SX 711 705	5	0	15	5	6	3
	Spitchwich Manor	SX 722 722	9	15	43	24	20	16
	U/s Holnechase Manor	SX 727 716	0	1	8	7	8	22
	U/s Holne Bridge	SX 728 706	1	0	11	6	8	9
	Queen of Dart	SX 734 693	1	3	38	15	13	19
	Northwood	SX 737 680	22	8	67	16	12	9
	D/s Dart Bridge	SX 744 677	6	42	61	7	9	19
	Caddaford	SX 752 655	0	10	36	5	7	10
	U/s Staverton Bridge	SX 784 637	4	21	35	2	0	2
Park Stickle	SX 796 636	5	43	55	1	1	2	
WEST DART	Prince Hall	SX 625 739	16	31	90	4	15	18
	Dunnabridge	SX 644 743	1	32	55	9	9	7
	Swincombe Foot	SX 649 737	35	68	144	3	12	15
	Huccaby	SX 659 729	29	58	62	9	18	17

RIVER DART - ALL SURVEYS 1965 - 1999

WATERCOURSE	SITE NAME	SALMON FRY(0+)				
		1975	1980	1987	1993	1994
EAST DART RIVER	Hartland Tor	-	-	-	-	-
	Postbridge	-	-	28.92	1.02	34.88
	Bellevier	16.40	59.95	20.48	#	#
	Laughter Hole	-	-	-	-	-
	Brimpt's Farm	0.20	-	-	-	-
	Badger's Holt	-	0.58	-	#	-
	D/s Dartmeet Bridge	-	-	-	#	-
RIVER DART	Dartmeet	-	-	-	-	-
	New Bridge	-	-	-	-	-
	Holne Bridge	-	-	-	#	#
	Queen of the Dart	-	-	-	#	#
	Northwood	-	-	3.29	#	-
	Austin's Bridge	-	-	-	-	-
	Whortley Copse	-	-	0.00	-	-
	Staverton	-	-	-	#	-
	U/s Buckfastleigh Weir	-	-	-	-	#
	D/s Dart Bridge	-	-	-	#	#
	Park Stickle	-	-	-	#	-
	D/s Railway Bridge	-	-	-	-	#
	Rill Farm	-	-	-	-	#
	Caddaford	-	-	-	@	-
U/s Holnechase Hotel	-	-	-	@	-	
Spitchwich Manor	-	-	-	#	-	
Hannaford	-	-	-	#	-	
STANNON BROOK	Stannon Bridge	-	-	-	37.81	-
	Postbridge	-	-	204.35	76.50	39.78
DURY BROOK	Dury Farm	-	-	67.80	21.29	-
WALLA BROOK	Statts Bridge	-	-	-	-	-
	Pizwell	-	0.00	-	-	-
	Runnage Bridge	-	-	220.35	145.13	-
	Riddon Farm	6.20	-	-	-	-
	Babeny	-	-	12.01	3.85	-
Sherril	-	-	-	-	-	
WEST DART RIVER	U/s Devonport Leat	-	-	-	0.00	-
	D/s Devonport Leat	-	-	-	0.00	-
	Crockern Tor	5.50	2.28	6.54	2.94	-
	Two Bridges	-	-	-	-	-
	Prince Hall	5.70	-	-	#	-
	Dunnabridge	-	-	-	#	-
	U/s Swincombe Foot	-	-	-	-	-
	D/s Swincombe Foot	-	-	-	#	-
Huccaby	9.80	-	-	#	-	
COWSIC RIVER	U/s Devonport leat intake	-	-	-	0.00	-
	Beardown Wood	-	-	-	-	0.00
	Beardown Farm	0.00	4.72	0.00	0.00	0.00
BLACKBROOK RIVER	A384 Road Bridge	-	-	-	-	-
	Blackbrook Bridge/Cairns	23.00	23.44	-	22.81	-
	Oakery Bridge	-	-	77.49	11.54	-
	D/s Princetown S.t.w Discharge	-	-	-	-	-

SALMON DENSITY/100 m<sup>2</sup>

SALMON PARR AND OLDER(1+)

<u>1996</u>	<u>1999</u>	<u>1965</u>	<u>1969</u>	<u>1975</u>	<u>1980</u>	<u>1987</u>	<u>1993</u>	<u>1994</u>	<u>1996</u>	<u>1999</u>
-	-	1.68	22.50	-	-	-	-	-	-	-
2.64	23.84	10.44	22.40	-	-	29.02	12.29	6.49	15.17	6.74
#	#	15.36	55.40	16.80	24.19	11.86	#	#	#	#
-	-	9.36	8.20	-	-	-	-	-	-	-
-	-	2.16	3.50	5.90	-	-	-	-	-	-
#	#	5.76	-	-	5.80	-	#	-	#	#
#	#	-	-	-	-	-	#	-	#	#
-	-	-	3.80	-	-	-	-	-	-	-
-	-	7.32	9.50	-	-	-	-	-	-	-
@	#	-	5.60	-	-	-	#	#	#	#
#	#	-	11.50	-	-	-	#	#	#	#
#	#	-	-	-	-	3.62	#	-	#	#
-	-	-	4.80	-	-	-	-	-	-	-
-	-	-	-	-	-	0.06	-	-	-	-
#	#	-	0.30	-	-	-	#	-	@	#
-	-	-	-	-	-	-	-	#	-	-
#	#	-	-	-	-	-	#	#	#	#
#	#	-	-	-	-	-	#	-	#	#
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#	#	-	-	-	-	-	#	-	#	#
#	#	-	-	-	-	-	#	-	#	#
#	#	-	-	-	-	-	#	-	#	#
@	#	-	-	-	-	-	#	-	#	#
0.00	0.00	-	-	-	-	-	4.81	-	5.18	20.94
85.46	162.22	-	-	-	-	37.61	8.39	12.59	32.58	14.83
14.54	0.00	-	-	-	-	5.29	1.28	-	12.18	10.76
-	-	20.40	0.00	-	-	-	-	-	-	-
-	-	12.60	12.80	-	0.41	-	-	-	-	-
183.16	247.60	-	8.40	-	-	13.61	10.83	-	34.66	33.27
-	-	6.24	2.90	19.60	-	-	-	-	-	-
1.25	0.00	-	-	-	-	17.83	5.23	-	4.37	6.01
-	-	7.20	22.60	-	-	-	-	-	-	-
0.00	0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	0.00	-	-	-	-	-	0.41	-	0.00	0.00
3.52	2.38	3.00	8.10	1.47	0.98	1.60	2.94	-	2.69	5.58
-	-	2.88	1.40	-	-	-	-	-	-	-
#	#	7.68	6.90	11.67	-	-	#	-	#	#
#	#	-	-	-	-	-	#	-	#	#
-	-	-	11.70	-	-	-	-	-	-	-
#	#	-	-	-	-	-	#	-	#	#
#	#	16.68	5.20	3.30	-	-	#	-	#	#
1.65	0.00	-	-	-	-	-	0.00	-	4.14	0.00
-	-	-	-	-	-	-	-	0.00	-	-
0.00	0.00	0.00	0.60	0.00	2.64	1.48	0.00	0.57	0.52	8.98
-	-	12.96	8.40	-	-	-	-	-	-	-
25.17	0.90	36.00	12.50	15.80	25.36	-	45.37	-	8.75	31.29
21.76	5.63	-	-	-	-	23.11	35.58	-	15.06	37.89
40.69	3.78	-	-	-	-	-	-	-	13.52	17.91

WATERCOURSESITE NAMESALMON FRY(0+)1975198019871993199

CHERRY BROOK

U/s Powder Mills

-

-

-

-

-

Powder Mills

-

-

28.70

-

D/s Powder Mills

-

-

-

-

-

Higher C.B. Bridge

-

-

0.00

67.99

-

Smith Hill Farm

19.80

13.58

-

-

-

Lower C.B. Bridge

-

-

114.61

35.92

-

SWINCOMBE RIVER

U/s Water Intake

-

-

39.50

5.71

-

Swincombe Farm

2.30

9.33

-

-

-

Sherberton Farm

-

-

-

-

-

Wydemeet

-

-

49.60

1.66

-

STRANE RIVER

Whiteworks

-

-

12.49

8.48

-

O BROOK

Saddlers Br./Combestone Tor

-

-

0.00

0.00

-

EAST WEBBURN RIVER

Isaford

-

-

-

0.00

-

Bag Park Bridge

-

-

-

-

-

Wooder Manor

-

-

319.63

150.00

-

Widdecombe Bridge

7.50

7.57

-

-

-

Cockingford Bridge

-

-

41.01

39.77

-

RIVER WEBBURN

Mistresses Piece

-

-

4.79

1.51

-

Lower Lodge Bridge

-

0.26

-

-

-

WEST WEBBURN RIVER

Challacombe Farm

-

-

-

39.88

-

Grendon Bridge

-

-

41.60

88.69

-

Cator Bridge

-

-

-

32.62

-

Shallowford Bridge

14.70

-

-

-

-

Ponsworthy

-

-

8.20

3.15

-

BROADAFORD STREAM

D/s Gamble Cott Bridge

-

-

-

-

-

Broadaford Bridge

-

-

-

0.00

-

RUDDYCLEAVE WATER

Putsham Down Br.

-

-

-

0.00

-

Greypark Wood

-

-

0.00

0.00

-

HOLY BROOK

Hawson Court

-

-

-

-

-

Littlecombe

-

-

-

0.00

-

Hembury Woods

-

-

26.45

12.54

-

RIVER ASHBURN

Rew

-

-

-

-

-

D/s Bellford Mill

-

-

-

0.00

-

Barnsley Bridge

-

-

0.00

0.00

-

Pridhamsleigh

-

-

4.04

0.00

-

RIVER MARDLE

Chalkford

-

-

-

0.00

-

Brook Mill Bridge/Brook Farm

-

-

-

0.00

-

Bilberry Hill

-

0.00

-

-

-

Merryfield

-

-

0.00

0.00

-

DEAN BURN

Dean Woods

-

-

-

0.00

-

Lower Dean Bridge

-

-

6.37

0.00

-

WOOLSTON STREAM

D/s Lower Coombe

-

-

-

0.00

-

Abham

-

-

0.00

0.00

-

SALMON PARR AND OLDER(1+)

	<u>1996</u>	<u>1999</u>	<u>1965</u>	<u>1969</u>	<u>1975</u>	<u>1980</u>	<u>1987</u>	<u>1993</u>	<u>1994</u>	<u>1996</u>	<u>1999</u>
-	-	-	-	10.50	-	-	-	-	-	-	-
7.73	0.00	5.28	-	-	-	-	-	22.49	-	13.03	12.71
-	-	-	-	9.50	-	-	-	-	-	-	-
15.66	35.31	-	-	-	-	-	7.18	22.62	-	13.50	7.63
-	-	9.12	16.70	11.60	43.21	-	-	-	-	-	-
182.00	57.20	-	-	-	-	-	19.88	17.47	-	15.87	9.23
2.36	-	-	4.50	-	-	22.60	9.34	-	-	9.01	-
-	-	11.88	10.00	4.53	20.44	-	-	-	-	-	-
-	-	10.56	5.00	-	-	-	-	-	-	-	-
1.64	18.70	-	-	-	-	19.75	8.91	-	-	8.15	11.89
0.00	0.00	-	-	-	-	14.32	4.43	-	-	14.81	22.16
0.00	0.00	-	-	-	-	0.00	0.00	-	-	0.00	0.00
0.00	0.00	-	-	-	-	-	-	0.00	-	0.00	0.00
-	-	-	2.80	-	-	-	-	-	-	-	-
10.37	35.02	-	-	-	-	42.79	16.67	-	-	14.24	12.08
-	-	2.76	18.50	13.80	11.94	-	-	-	-	-	-
21.89	-	22.44	8.70	-	-	48.72	27.49	-	-	11.14	-
3.20	4.34	-	-	-	-	20.76	10.83	-	-	12.10	5.44
-	-	-	13.20	-	12.56	-	-	-	-	-	-
9.96	43.22	-	-	-	-	-	4.03	-	-	28.68	14.72
41.42	50.56	12.84	12.10	-	-	8.88	12.93	-	-	10.80	9.97
10.05	21.86	12.00	13.90	-	-	-	17.15	-	-	20.54	13.74
-	-	14.76	12.30	15.40	-	-	-	-	-	-	-
2.17	4.31	12.12	5.00	-	-	24.39	9.17	-	-	9.14	15.96
-	0.00	-	-	-	-	-	-	-	-	-	0.00
9.92	0.00	-	-	-	-	-	-	0.00	-	1.50	1.38
0.00	0.00	-	-	-	-	-	-	0.00	-	0.00	0.00
0.00	0.00	-	-	-	-	10.07	4.25	-	-	0.77	0.00
-	-	-	0.60	-	-	-	-	-	-	-	-
8.07	0.00	-	-	-	-	-	0.00	-	-	0.00	0.00
0.00	0.85	-	-	-	-	25.11	4.52	-	-	1.50	1.46
-	-	-	0.00	-	-	-	-	-	-	-	-
0.00	0.00	-	-	-	-	-	0.00	-	-	0.00	0.00
0.00	0.00	-	-	-	-	0.00	0.00	-	-	0.00	0.00
0.00	0.00	8.76	5.00	-	-	0.00	0.00	-	-	2.38	0.00
0.00	0.00	-	-	-	-	-	-	0.00	-	0.00	0.00
0.00	0.00	0.00	-	-	-	-	-	0.00	-	3.82	0.64
-	-	-	0.00	-	15.28	-	-	-	-	-	-
0.00	3.79	-	-	-	-	0.43	0.00	-	-	0.00	2.71
0.00	0.00	-	-	-	-	-	-	0.00	-	0.00	0.00
0.00	0.00	-	-	-	-	1.46	0.00	-	-	0.00	0.00
0.00	0.00	-	-	-	-	-	-	0.00	-	0.00	0.00
0.00	0.00	-	-	-	-	0.00	0.00	-	-	0.00	0.00

WATERCOURSESITE NAMESALMON FRY(0+)

		<u>1975</u>	<u>1980</u>	<u>1987</u>	<u>1993</u>	<u>1994</u>	<u>1996</u>
BIDWELL BROOK	Brooking	-	-	0.00	0.00	-	0.00
	Dartington STW	-	-	0.00	0.00	-	0.63
RIVER HEMS	Blackler	-	0.00	-	-	-	-
	Gullford Bridge	-	-	-	0.00	-	0.00
	Portridge Bridge	-	-	0.00	0.00	-	0.00
	Bow Bridge	-	-	-	0.00	-	0.00
	Tally-ho	-	0.00	0.84	1.27	-	0.00
	Littlehempston	-	-	-	0.60	-	0.00
AM BROOK	D/s Am House Weir	-	-	-	0.00	-	0.00
GATCOMBE BROOK	Afton Cross	-	-	-	0.00	-	0.00
	Pig and Whistle	-	-	0.00	0.00	-	0.00
STOKE GABRIEL ST.	D/s Churchwards Br.	-	-	-	0.00	-	0.00
	U/s Port Bridge	-	-	-	0.00	-	0.00
HARBOURNE RIVER	Harbourneford	-	0.00	0.00	0.00	-	0.00
	D/s Hatchlands	-	-	-	1.60	-	0.00
	Yeo Bridge	-	-	10.15	0.00	-	1.25
	Leigh Bridge	-	-	-	0.00	-	2.01
	Rolster	-	-	6.54	0.00	-	0.67
	Crowdy Mill	-	-	-	-	-	-
	Beenleigh	-	-	0.00	0.00	-	0.41
RIVER WASH	Washbourne	-	-	-	0.00	-	0.00
	Tuckenhay	-	-	0.00	0.00	-	0.00
DITTISHAM MILL STR.	Longacre Bridge	-	-	-	0.00	-	0.00
	East Cornworthy	-	-	0.00	0.00	-	0.00
OLD MILL STREAM	D/s Reservoir Dam	-	-	-	0.00	-	0.00
DEVONPORT LEAT	Older Bridge	-	-	0.00	0.00	-	0.00
	Tor Royal	-	-	0.00	0.00	-	0.00
	Beardown Farm	-	-	0.00	0.00	-	0.00
	Holming Beam	-	-	-	0.00	-	0.00

N.B. Fry ignored in 1965 & 1969

# = Species present (Semi-quantitative survey)

@ = Species absent (Semi-quantitative survey)

SALMON PARR AND OLDER(1+)

<u>1999</u>	<u>1965</u>	<u>1969</u>	<u>1975</u>	<u>1980</u>	<u>1987</u>	<u>1993</u>	<u>1994</u>	<u>1996</u>	<u>1999</u>
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	4.11	1.88	-	2.67	3.53
-	-	-	-	0.00	-	-	-	-	-
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	0.00	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	0.90	7.30	2.80	-	1.40	3.60
0.00	-	9.00	-	-	-	0.75	-	0.00	2.04
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	19.16	3.94	-	1.98	5.67
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	0.00	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	2.29	0.00
5.05	-	2.90	-	-	6.54	0.26	-	1.91	7.41
1.86	-	-	-	-	-	0.30	-	2.29	6.90
0.00	-	1.70	-	-	3.73	0.00	-	1.09	0.82
-	4.20	2.20	-	-	-	-	-	-	-
0.48	-	-	-	-	0.42	0.00	-	0.00	0.48
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.00	-	0.00	0.00
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	0.00	0.65	-	0.00	0.00
0.00	-	-	-	-	0.00	0.00	-	0.00	0.00
0.00	-	-	-	-	-	0.71	-	0.00	0.00

Appendix 3.

Fishing Regulations of the Dart Fisheries Association and the Dart Angling Association.



## MISCELLANEOUS

9. No fish shall be sold or offered for sale.
10. Fishing from boats of any kind, including float tubes, is strictly prohibited.
11. Any fish retained shall be shown on request to Members of the Committee or EA Baliff.
12. Neither anglers nor their companions shall be accompanied on Association Water by a dog.
13. No angler shall occupy a pool, stand or run for more than 30 minutes, when others are waiting to fish.
14. Anglers shall confine themselves to paths by the riverbank and not walk unnecessarily along the railway line, other than at approved crossing points agreed with the Dart Valley Railway.
15. All gates opened to obtain access to the fishing must be closed immediately. Failure to comply renders the offender liable for any damage caused by strayed stock, etc.
16. Litter must not be left on the riverbank, nor thrown in the river. **Take it home.**
17. Lengths of unwanted nylon shall be taken home for disposal and never left on the riverbank or thrown into the water.
18. All Members and their guests shall complete a 'Return of Fish Caught', when requested to do so by the Honorary Secretary. Failure to comply with this rule may result in Membership being withdrawn.
19. No Member shall use the river for financial gain, such as paid gillie, without the prior written approval of the Committee, who will only issue such approval, when the arrangement can be seen to be of benefit to the Association.

# THE DART ANGLING ASSOCIATION FISHING REGULATIONS

(January 2001)

(Amended-January 2001)

*All persons wishing to fish on Association water must be in possession of:*

- (i) The appropriate Association Ticket*
- (ii) The appropriate Environment Agency Licence*
- (iii) A copy of these Regulations*

*Fishing regulations are reviewed annually and set by the Committee at their first Meeting in January. The Association has long been concerned about the state of fish stocks in the river, particularly the salmon component. To ensure future sustainability, whilst urging the authorities to move more effectively to combat the real causes of the decline such as habitat degradation, pollution and over-exploitation on the high seas, the Association has long adopted a conservation ethic designed to reduce exploitation in the river, until stocks recover sufficiently. The following Regulations are finely balanced to protect not only the fish stocks, but also the future of the sport of angling and the Association.*

*The Committee introduces the restrictive elements reluctantly, but encourages all Members to adopt the conservation ethic contained therein, until such time as recovery permits relaxation of the measures to take place.*

## **I. SALMON**

National Byelaws, introduced in 1999 to run for a period of 10 years, restrict the taking of any Salmon prior to 15th June, inclusive. All fishing for Salmon before that time is strictly catch and release.

All anglers to restrict their takeable catch in the river from 16th June onwards, to no more than 3 Salmon in the season. A takeable limit of 1 Salmon in any one day shall apply.

Subject to above overriding Regulations, the following advisory measures apply:- All Members and visitors are advised for conservation reasons to return the first Salmon they catch after 15th June. Catch and release is encouraged at all times, where the condition of the fish after capture makes this possible.

The Association is keen to ensure that all heavily coloured or gravid fish are returned to the river and, in particular, encourages the return of all hen salmon and all salmon over an approximate weight of 10lbs after 15th June.

## **5. DAY TICKETS - NON SALMON MEMBERS**

Members who are not holders of season tickets for Salmon Membership, may by notifying the Honorary Secretary in advance, purchase a one-day ticket per month, at a cost to be determined by the Committee, to fish for Salmon on any part of the Association Water except Totnes Weir Pool.

This facility is not available for Junior Members.

## **6. GUEST TICKETS**

Members, as a privilege of Membership, shall be entitled by notification in advance to apply to the Honorary Secretary for not more than five tickets per season, of the same or lower category as their own season ticket. Each ticket for use by a personal guest on a specific date. This at a cost to be determined by the Committee.

Members must accompany their guests at all times on the river. Such tickets shall be issued at the discretion of the Committee, which may withdraw this privilege if it is abused. Excessive use of tickets for the same guest in the same season will be regarded as abuse. In the case of Totnes Weir, if there are more than five Member rods fishing then the guest should share his or her host's rod.

## **7. CHILDREN OF MEMBERS**

A member is entitled to take his or her child or grandchild, under the age of eighteen years, to fish for Migratory Trout or Salmon free of charge, provided that child or grandchild is a Junior Member of the Association and accompanied by the Member, fishes only by sharing the Member's rod and is in possession of the appropriate Environment Agency Licence.

## **8. VISITORS' TICKETS**

Subject to review from time to time, visitors' tickets will be available for purchase from local shops and outlets as follows:-

### **Totnes Weir Pool**

One Salmon ticket per day for fishing from sunrise until one hour after sunset for the Salmon season agreed by the Environment Agency.

One Migratory Trout ticket per day for the season applicable to Migratory Trout.

These will only be available from one source.

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**Church Commissioners** (does not include Totnes Weir Pool, Halliwells, Hembury, Dartbridge, Kilbury, Fogdens, Staverton Court or Lancasters).

Limited day or week Salmon or Brown Trout tickets for fishing from sunrise until one hour after sunset from 15th March to 30th September.

Limited day or week migratory trout tickets for fishing from sunset to 3am the following morning from 15th March to 30th September.

To facilitate catch and release, the use of barbless or debarbed hooks is recommended. In particular the use of a single barbless or debarbed hook is encouraged. This applies equally to flies or lures, which could be amended for the purpose. The onus is entirely on the angler to ensure their tackle is designed to cause as little damage as possible to the fish, so that all fish caught can potentially be successfully released. When limits as above have been attained then the use of barbless or debarbed hooks is essential.

**Additional local measures - some subject of local Byelaw:-**

No fishing from one hour after sunset until sunrise - (and see Regulation 4).

Prawn and Shrimp are only permitted below Staverton Bridge, excluding Totnes Weir Pool, only after 15th June. Fishing with worm or other bait is not permitted anywhere on Association Waters. The use of a gaff or tailer is prohibited.

Spinning for Salmon is permitted except as follows:-

(a) Totnes Weir Pool from 1st April to 30th September - Fly only.

Spinning is however permitted at any time of the season when the flood marker is covered.

(b) The following water is 'Fly Only' for the whole of the season:-

(i) the marked sections between the tail of Abbotsmead and the stile adjacent to Richmonds Pool and likewise between the stile above Quarry Pool and the tail of Wortley Pool. No angler shall allow his spinner to be used in 'Fly Only' water except when following a hooked fish.

(ii) Halliwell's

Spinning line shall not be less than 8lbs breaking strain. Lures shall not be less than 1.5" (38mm) long including hooks. No treble hook shall be larger than No.3. No weight shall be nearer than 10" (250mm) from the lure.

## **2. MIGRATORY TROUT**

Fly fishing only is permitted. The size limit is 10" (250mm) measured from nose to the centre of tail fin. No treble hook shall be larger than No. 6 (Redditch Scale).

No restriction on hours of fishing subject to the provisions of Regulation 4.

The bag limit is 2 Migratory Trout per day.

## **3. BROWN TROUT**

Fly fishing only is permitted. The size limit is 8" (200mm) measured as for Migratory Trout. The bag limit is 2 per day. No fishing from hour after sunset until sunrise.

## **4. TOTNES WEIR POOL**

Members holding Season Tickets for Salmon or Migratory Trout will be limited by the Committee to odd or even dates when they may fish Totnes Weir Pool. When a month has 31 days (viz. March, May, July or August) both odd and even Members may fish on the first day of the following month. Migratory Trout fishing is from sunset on their allocated date until sunrise on the following day. Fishing from the weir face at Totnes Weir Pool is not permitted during exceptionally low water conditions.

The deciding factor shall be when the face of the weir is dry, excluding the flow of water alongside the fillet. Anglers fish from the weir face at their own risk.

## **DART FISHERIES ASSOCIATION**

### **FISHING REGULATIONS FOR 2002**

**In addition to the National Byelaws, which require all salmon caught before June 16<sup>th</sup> to be returned, the DFA strongly recommends that:**

- **All salmon over 10lbs [approx. 32ins long], or which are coloured or which have been tagged, to be returned.**
- **All salmon caught in September to be returned.**
- **Not more than one salmon in any one day and not more than three salmon in the period from June 16<sup>th</sup> to August 31st may be kept.**
- **For salmon - single or double barbless hooks no larger than size 6 to be used.**
- **Not more than two seatrout per night to be kept.**

**In order to give the Committee the information they need to manage the river it would be most helpful if riparian owners could send a note of their own catches, and their guests/tenants catches, of both salmon and seatrout to the Hon. Secretary at the end of the season.**