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1989 Atlantic Salmon Sport Catch Statistics Maritime Provinces

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STATISTICS - MARITIME PROVINCES

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ABSTRACT

O'Neil, S.F., D.A. Stewart, K. Rutherford and R. Pickard. 1996. 1989 Atlantic salmon sport catch statistics, Maritime Provinces. Can. Data Rep. Fish. Aquat. Sci. No. 999. v + 81 p.

The Maritime Provinces Atlantic salmon sport catch in 1989 was 50,961 fish - 36,376 grilse retained, 1,562 grilse released, and 13,023 large salmon (> 63 cm fork length) released. Field staff estimated that 37 New Brunswick rivers yielded 25,060 bright fish (19,862 grilse retained) and 7,996 kelts to anglers. Nova Scotia anglers reported fishing on 96 rivers and harvested or released a total of 17,667 large salmon and grilse. A total of 238 grilse were caught on Prince Edward Island. Anglers spent 82,722 rod-days on New Brunswick rivers and 82,627 rod-days on Nova Scotia rivers during the 1989 season. Catch per unit effort (fish per rod-day) for the Maritimes was 0.300.

Keywords: Atlantic salmon, sport catch, rod-days, kelts, grilse, large salmon, New Brunswick, Nova Scotia, Maritimes.

RÉSUMÉ

O'Neil, S.F., D.A. Stewart, K. Rutherford and R. Pickard. 1996. 1989 Atlantic salmon sport catch statistics, Maritime Provinces. Can. Data Rep. Fish. Aquat. Sci. No.999. v + 81 p.

Les prises sportives de saumon de l'Atlantique effectuées dans les provinces Maritimes en 1989 s'établissent à 50 961 saumons, soit 36 376 madeleineaux capturés et gardés, 1 562 madeleineaux remis à l'eau et 13 023 gros saumons (plus de 63 cm de longueur à la fourche) remis à l'eau. Les employés des régions concernées ont estimé à 25 060 saumons de montée (19 862 madeleineaux gardés) et 7 996 charognards les prises obtenues dans 37 rivières du Nouveau-Brunswick. En Nouvelle-Écosse, les prises sportives de saumon, soit gardées soit remises à l'eau, obtenues dans 96 rivières s'élèvent à 17 667 gros saumons et madeleineaux. A Ile-du-Prince-Édward, les prises se sont limitées à 238 madeleineaux. En 1989, les pêcheurs ont consacré à la pêche 82 722 journées au Nouveau-Brunswick et 82 627 en Nouvelle-Écosse. La prise par effort unitaire (poissons par journée de pêche) pour les Maritimes a été de 0,300.

INTRODUCTION

This document records the reported Atlantic salmon sport catch and effort data for the Maritime Provinces for 1989.

The data portion of this report is divided into three sections, as follows:

Overview: This section includes a summary of sport catch and effort data collectively for the Maritimes as well as for each province. The Canadian catch of Atlantic salmon in sport fisheries is given in Table 1. Also included in this section is a summary of catch per unit effort and license sales for the three Maritime Provinces.

New Brunswick and Prince Edward Island: The catch and effort data for New Brunswick and Prince Edward Island rivers are collected by fishery officers with Fisheries and Oceans and biologists and field staff of the New Brunswick Department of Natural Resources and Energy. These data are presented separately from the Nova Scotia data because collection methods differ. This section includes catch and effort on individual rivers, by month, a variety of summaries of the data by geographic area or river system, and the seasons and variation orders for each river.

Nova Scotia: Individual anglers are expected to report their catch and effort data on Nova Scotia rivers. The data tables in this section include a summary of the angler reports which provides sport fisheries data on individual rivers. In addition, catch and effort are given for a variety of geographic areas including counties (Tables 21 and 25), Fisheries and Oceans statistical districts (Tables 20 and 24) and Salmon Fishing Areas (Tables 22 and 26). Open season dates are included on the catch data tables and any variation orders which affected bag limits or season dates can be found in Table 29.

Quality of the data

The sport catch data in New Brunswick and Prince Edward Island are collected principally by field staff who have known sources for "word-of-mouth" information which they assimilate with other

sources to reach the best available estimate of actual catches. These procedures have become progressively less reliable because of a change in fishery officer priorities and changes in fishing regulations which require the release of large salmon. Hence, these data should be considered minimum estimates, particularly for the large salmon catches. There is no method to estimate error associated with this data collection technique.

In Nova Scotia, each angler is required by law to return a license stub with a record of catch and effort data for each river fished. Response rates in the program are typically over 70% with the use of a single reminder letter to prompt nonrespondents. In 1989, the response rate was 73% and represents the input from 6,307 anglers (Table 18). A brief description of the procedures used to estimate angling catch for the province and for each river is given in Appendix 2.

The mandatory release of large salmon by anglers became law in 1984. In New Brunswick the regulation came into effect prior to the bright salmon fishery and in Nova Scotia on August 8, 1984. The abbreviated commercial salmon fishery which occurred in 1984 was the last within the Maritime Provinces. Together, these regulation changes have had an impact on the return of salmon to the rivers of the Maritimes and affected the nature of the data. As a result, comparison of catches prior to 1985 with data since then may mislead readers. The authors urge caution when comparing catch data over a series of years. Note that many of the tables record "retained" fish only. Prior to 1985 large salmon were retained. Since 1984, the number of large salmon or grilse that were released have not been included in those tables. The tables, in effect, record harvest. A summary of released fish for those New Brunswick rivers where the data were available is given in Table 11. The numbers of salmon and grilse reported released on rivers in Nova Scotia are given on the appropriate tables in the Nova Scotia section of the report.

COMMENT ON THE FISHERY

Recreational Atlantic salmon catches in 1989 were less than those reported in 1988 in most areas of Atlantic Canada (Table 1). The collective retained catch for rivers in the Maritime Provinces of 36,000 was down by 8% from the 39,000 fish harvested in 1988 (Table 2, O'Neil et al. 1991).

Management plan changes were introduced in 1984 to reduce the commercial harvest and interception fisheries, and to eliminate the large salmon harvest in the recreational fisheries of the Maritimes. Those changes were expected to contribute to increased returns to the rivers, but were not observed in 1989 when compared with the long-term (1970-88) or short-term (1984-88) mean catches of 37,000 fish and 35,000 fish, respectively. The one exception to the general decline in catches in 1989 was the catch of grilse in Nova Scotia rivers which increased from 8,000 in 1988 to 9,000 in 1989 (Table 2). CAFSAC (1989) noted that the estimated returns of Atlantic salmon to Salmon Fishing Areas of the Maritime Provinces in 1989 were generally down from both the 5-year and 10-year means. The decline was particularly evident in the Gulf of St. Lawrence salmon stocks.

The reduction in catches noted in 1989 relative to 1988 could in part be attributed to water levels in the rivers. The discharge data for 1989 from 12 stations around the Maritime Provinces indicate that water levels were the lowest in the 1982-89 time series for July and second lowest of the same time series for August (Fig. 1; Anon. 1982..1989).

The reported catch of salmon by "year of run" (where the bright salmon catch of one year is added to the kelt or slink salmon catch of the next) was 33,000 salmon in New Brunswick for 1988 (Table 3). This figure is up considerably from the 25,000 fish angled by "year of run" for 1987. Kelt fisheries do not occur in Nova Scotia or Prince Edward Island.

Effort in the recreational salmon fishery is expressed in rod-days. A rod-day is one day of effort which occurs when an angler spends any part of a day fishing on a

particular river. The combined effort of anglers who fished in the Maritime Provinces in 1989 was 170,000 rod-days (Table 4). This effort figure is similar to the 175,000 rod-days of effort expended in 1988 but well above the long- (1970-88) and short-term (1984-88) means of 137,000 and 163,000, respectively. Angler effort in Nova Scotia increased by 5% over the 1988 level to 82,600 rod-days. Effort decreased in New Brunswick from the 1988 level to 82,700 rod-days, a reduction of 9%. The number of rod-days reported on Prince Edward Island rivers fell from a high of 5,200 in 1988 to 4,600 in 1989 (Table 4).

Angler success is measured as catch per unit of effort (CPUE), and for the Atlantic salmon fishery, as catch per rod-day. The CPUE for the Maritime Provinces has ranged from a low of 0.151 in 1983 to a high of 0.428 in 1970 (Table 4). In other words, when fisher success was at its highest in 1970, each fisher took approximately 2.3 days to catch a salmon. When angler success was lowest, each person took approximately 6.6 days to catch a fish.

Trends in catch per rod-day can indicate changes in the availability or abundance of fish. The CPUE for New Brunswick and Nova Scotia remained relatively constant from the early 1970s until 1977 after which a variable but generally downward trend in catch per rod-day occurred for several years (Fig. 2). The low CPUE evident in 1983 preceded the management plan changes implemented to restore runs of Atlantic salmon. Some evidence of the effect of those regulation changes can be seen in the graph depicting catch per unit effort for the period 1984-1986 for all three Maritime Provinces. The improved catch rates were not sustained in New Brunswick and Nova Scotia after 1986 or in P.E.I. after 1987 (Fig. 2). The recent estimate (i.e., since 1984) of Atlantic salmon sport catch is known to be an underestimate due to the unreported release of many large salmon and grilse. Thus the catch per unit effort figures since 1984, given in Table 4, may be lower than the true values.

The catch of salmon from Maritime rivers which discharge into the Gulf of St. Lawrence was approximately twice the number of fish angled in waters tributary to

the Atlantic and Bay of Fundy coasts of New Brunswick and Nova Scotia in 1989 (Table 5). The largest salmon river in the Maritime Provinces in terms of numbers of fish is the Miramichi River. Collectively, the streams in that system provided 18,500 grilse to fishers in the kelt and bright salmon fisheries, combined. That number represents 75% of the salmon harvested from rivers within the Gulf Region. In the Scotia-Fundy Region, the largest catch occurred on the Saint John River - 2,800 fish, which accounted for 24% of the total harvest within the region (Table 5).

Atlantic salmon sport catch has become increasingly important as an indicator of the size of the salmon run to a river. This is particularly true in cases where there are no other means of estimating the size or health of the Atlantic salmon stock in that river (CAFSAC 1989). There are several rivers where the return of salmon is monitored through a counting facility. Counts of grilse at those facilities in 1989 indicated that the return of fish to Atlantic coast rivers was similar to returns in 1988 at most locations (Tables 6 and 7; Fig. 3). The exception was the LaHave River where the number of grilse counted at Morgan Falls was down from 3,500 in 1988 to 2,600 in 1989. The number of large salmon counted in 1989 was up from numbers seen in 1988 at 3 of 4 traps where counts are complete (Tables 6 and 7; Fig. 4).

License sales in 2 of the 3 Maritime Provinces increased relative to 1988 sales. In New Brunswick, a change in fee structure for the general fishing license and salmon license resulted in a marked increase in license sales from 21,866 in 1988 to 36,102¹ in 1989 (Table 8). In Nova Scotia, the number of non-resident license holders increased 30% from 1,263 in 1988 to 1,641

¹ The salmon angling license cost \$16.00. Holders of a salmon license could fish for any species where angling was permitted. Holders of a general fishing license could not fish for salmon. In 1988 and earlier the general fishing license was free. The fee for the general license increased to \$10.00 in 1989. The higher general license fee caused many fishers to opt for the salmon license in 1989 thus causing the large increase in number of salmon license holders.

in 1989. The number of resident salmon fishers also increased from 6,764 to 6,974. The number of licensed salmon fishers in Prince Edward Island decreased 10% from 719 in 1988 to 646 in 1989.

Angling seasons in 1989 in New Brunswick included a kelt (Apr. 15 to May 15) and bright season (variable between June 1 and October 31 depending on the river) on most rivers (Table 9). Kelt fisheries are not permitted on several rivers in New Brunswick (e.g., Restigouche system, Nepisiguit, etc.) or on any rivers in Nova Scotia or Prince Edward Island. Some rivers or areas of rivers were closed to fishing in 1989 (Table 10).

The available estimates of large salmon released in 1989 on New Brunswick rivers totalled 6,063 fish (Table 11). Some of these estimates were arrived at after the seasons closed, so are known to be rough approximations only.

The Cheticamp River is included in the Cape Breton Highlands National Park, so angling data are obtained through park wardens. The catch and effort report for the Cheticamp River is given in Table 28.

ACKNOWLEDGEMENTS

The Nova Scotia salmon angling license stub program is managed jointly by the Department of Fisheries and Oceans and the Nova Scotia Department of Natural Resources. In particular, the contribution of the licensing unit at Natural Resources has been invaluable in the smooth running of this system.

Thanks are also due to the many anglers who completed and returned their license stubs.

The provision of data on many of the New Brunswick rivers by wardens and biologists with the New Brunswick Department of Natural Resources and Energy is greatly appreciated. Fisheries and Oceans field officers in some locations have contributed catch and effort statistics which we gratefully acknowledge. The Nepisiguit River data was made available through the generous efforts of B. Baker of the Nepisiguit River Association.

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TABLE 1. Atlantic salmon angling catches (retained fish), Canada, 1965-89.

Year angled	Numbers of large salmon and grilse					Total
	New Brunswick	Nova Scotia	Prince Edward Island	Quebec	Newfoundland and Labrador	
1965	66,962	2,655	12	12,019	34,947	116,595
1966	85,935	3,596	10	12,873	34,626	137,040
1967	75,002	5,245	27	13,424	27,876	121,574
1968	27,373	3,069	10	8,603	35,744	74,799
1969	43,009	3,174	12	14,132	40,545	100,872
1970	34,969	4,948	13	14,846	37,167	91,943
1971	19,348	3,910	0	8,801	32,711	64,770
1972	32,119	4,152	7	14,131	29,175	79,584
1973	30,537	5,144	2	15,189	45,936	96,808
1974	42,237	8,519	2	17,455	31,002	99,215
1975	27,593	3,560	0	15,507	38,930	85,590
1976	43,169	7,309	7	15,348	42,070	107,903
1977	57,936	7,027	0	20,028	42,987	127,978
1978	24,741	4,067	6	18,473	33,640	80,927
1979	26,210	7,143	3	11,308	36,457	81,121
1980	32,698	8,356	6	24,244	42,640	107,944
1981	28,499	10,232	112	22,637	54,680	116,160
1982	25,116	6,572	83	18,473	47,806	98,050
1983	16,263	7,975	11	12,079	38,602	74,930
1984	16,747	6,083	7	11,897	43,287	78,021
1985	24,042	8,527	47	13,767	40,042	86,425
1986	40,308	7,998	236	17,695	41,427 ¹	107,664
1987	23,520	8,330	476	16,697	30,479	79,502
1988	30,779	8,036	643	21,087	46,074	106,619
1989	26,993	9,145	167	16,508	23,607	76,420

¹ Claytor and Mullins 1988; O'Connell, et al. 1988.

TABLE 2. Atlantic salmon angling catches (retained fish) by year angled, Maritime Provinces, 1970-89.

Year angled	Numbers of large salmon and grilse					
	New Brunswick			Nova Scotia	Prince Edward Island	Total
	Kelt	Bright	Total			
1970	7,081	27,888	34,969	4,948	13	39,930
1971	5,406	13,942	19,348	3,910	0	23,258
1972	2,563	29,556	32,119	4,152	7	36,278
1973	7,944	22,593	30,537	5,144	2	35,683
1974	8,655	33,582	42,237	8,519	2	50,758
1975	6,455	21,138	27,593	3,560	0	31,153
1976	9,386	33,783	43,169	7,309	7	50,485
1977	22,832	35,104	57,936	7,027	0	64,963
1978	8,307	16,434	24,741	4,067	6	28,814
1979	8,935	17,275	26,210	7,143	3	33,356
1980	6,326	26,372	32,698	8,356	6	41,060
1981	9,753	18,746	28,499	10,232	112	38,843
1982	2,152	22,964	25,116	6,572	83	31,771
1983	4,533	11,730	16,263	7,975	11	24,249
1984	1,709	15,038	16,747	6,083	7	22,837
1985	3,810	20,232	24,042	8,527	47	32,616
1986	1,690	38,618	40,308	7,998	236	48,542
1987	3,259	20,261	23,520	8,330	476	32,326
1988	4,434	26,345	30,779	8,036	643	39,458
1989	7,131	19,862	26,993	9,145	167	36,305
Mean						
1970-88	6,591	23,768	30,360	6,731	87	37,178
1984-88	2,980	24,099	27,079	7,795	282	35,156

TABLE 3. Atlantic salmon angled and retained by year of run¹, Maritime Provinces, 1970-88.

Year of run	Numbers of grilse					
	New Brunswick			Nova Scotia	Prince Edward Island	Total
	Kelt	Bright	Total			
1970	5,406	27,888	33,294	4,948	13	38,255
1971	2,563	13,942	16,505	3,910		20,415
1972	7,944	29,556	37,500	4,152	7	41,659
1973	8,655	22,593	31,248	5,144	2	36,394
1974	6,455	33,582	40,037	8,519	2	48,558
1975	9,386	21,138	30,524	3,560		34,084
1976	22,832	33,783	56,615	7,309	7	63,931
1977	8,307	35,104	43,411	7,027		50,438
1978	8,935	16,434	25,369	4,067	6	29,442
1979	6,326	17,275	23,601	7,143	3	30,747
1980	9,753	26,372	36,125	8,356	6	44,487
1981	2,152	18,746	20,898	10,232	112	31,242
1982	4,533	22,964	27,497	6,572	83	34,152
1983	1,709	11,730	13,439	7,975	11	21,425
1984	3,810	15,038	18,848	6,083	7	24,938
1985	1,690	20,232	21,922	8,527	47	30,496
1986	3,259	38,618	41,877	7,998	236	50,111
1987	4,434	20,261	24,695	8,330	476	33,501
1988	7,131	26,345	33,476	8,036	643	42,155

1. The kelt salmon catch in any one year is added to the bright salmon catch of the previous year, in order to give the total angling catch from a specific annual run.

TABLE 4. Angling effort (rod-days) and catch per unit effort (CPUE) for the Maritime Provinces, by year of catch, 1970-89.

Year	Maritimes		Nova Scotia		New Brunswick		Prince Edward Island	
	Rod-days	CPUE	Rod-days	CPUE	Rod-days	CPUE	Rod-days	CPUE
1970	93,373	0.428	30,386	0.163	62,783	0.557	204	0.064
1971	76,106	0.306	26,104	0.150	49,919	0.388	38	0.000
1972	92,401	0.393	26,951	0.154	65,312	0.492	138	0.051
1973	106,758	0.334	32,221	0.160	74,369	0.411	168	0.012
1974	139,336	0.364	46,825	0.182	92,433	0.457	78	0.026
1975	86,907	0.358	19,880	0.179	67,027	0.412	0	0.000
1976	131,954	0.383	39,901	0.183	91,789	0.470	264	0.027
1977	159,481	0.407	43,463	0.162	115,907	0.500	111	0.000
1978	107,989	0.267	33,629	0.121	74,225	0.333	135	0.044
1979	132,639	0.251	57,520	0.124	75,059	0.349	60	0.050
1980	158,016	0.260	69,067	0.121	88,818	0.368	131	0.046
1981	161,272	0.241	70,410	0.145	89,948	0.317	914	0.123
1982	182,921	0.174	72,472	0.091	108,314	0.232	2,135	0.039
1983	160,808	0.151	74,601	0.107	85,743	0.190	464	0.024
1984 ¹	134,764	0.210	59,833	0.146	74,248	0.267	683	0.010
1985 ¹	160,382	0.303	64,947	0.251	94,402	0.342	1,033	0.045
1986 ¹	190,994	0.384	77,204	0.259	111,004	0.479	2,786	0.085
1987 ¹	152,978	0.296	69,310	0.230	81,303	0.357	2,365	0.201
1988 ¹	175,029	0.310	78,544	0.203	91,312	0.412	5,173	0.124
1989 ¹	169,962	0.300	82,627	0.221	82,722	0.400	4,613	0.052
Mean								
1970-88	137,058	0.306	52,277	0.165	83,890	0.386	888	0.050
Mean								
1984-88	162,829	0.301	69,968	0.218	90,454	0.371	2,408	0.093

1. CPUE should be considered a minimum as large salmon released data is underestimated.

TABLE 5. Scotia-Fundy and Gulf Region retained catches by year angled (kelt and bright fish), 1970-89.

Year	Numbers grilse					
	Scotia Fundy			Gulf		
	Kelt	Bright	Total	Kelt	Bright	Total
1970	64	6,869	6,933	7,017	25,980	32,997
1971	157	5,687	5,844	5,249	12,165	17,414
1972	88	6,485	6,573	2,475	27,230	29,705
1973	99	7,755	7,854	7,845	19,984	27,829
1974	93	11,439	11,532	8,562	30,664	39,226
1975	185	6,985	7,170	6,270	17,713	23,983
1976	314	12,727	13,041	9,072	28,372	37,444
1977	265	11,175	11,440	22,567	30,956	53,523
1978	122	5,371	5,493	8,185	15,136	23,321
1979	47	10,337	10,384	8,888	14,084	22,972
1980	45	13,278	13,323	6,281	21,456	27,737
1981	38	12,476	12,514	9,715	16,614	26,329
1982	49	10,898	10,947	2,103	18,721	20,824
1983	109	10,830	10,939	4,424	8,886	13,310
1984	49	8,722	8,771	1,660	12,406	14,066
1985	103	12,538	12,641	3,707	16,268	19,975
1986	102	11,049	11,151	1,588	35,780	37,368
1987	184	10,333	10,517	3,075	18,260	21,335
1988	50	10,506	10,556	4,384	24,517	28,901
1989	N/A	11,690	11,690	7,131	17,484	24,615
Mean 1970-88	114	9761	9875	6477	20800	27277

N/A = not available

TABLE 6. Grilse (1SW) and large salmon (MSW) counts at several of Scotia-Fundy Region's salmon monitoring facilities, 1986-1989. The hatchery component of returns is given in parentheses. These numbers are included in the total counts.

River (site)	1986		1987		1988		1989	
	1SW	MSW	1SW	MSW	1SW	MSW	1SW	MSW
LaHave (Morgan Falls)	1676 (130)	647 (76)	3102 (573)	611 (79)	3520 (699)	449 (59)	2573 (489)	681 (180)
Liscomb (Falls)	1502 (766)	225 (108)	2137 (523)	142 (54)	908 (431)	120 (44)	820 (288)	146 (71)
Saint John (Mactaquac)	7046 (699)	4143 (487)	8000 (2894)	3435 (344)	9191 (1129)	2600 (670)	9587 (1170)	4291 (437)
St. Croix (Milltown)	63 (25)	257 (53)	195 (67)	177 (42)	102 (9)	292 (102)	116 (37)	115 (21)
Tusket (Falls) ¹	138 (71)	34 (8)	851 (735)	28 (11)	427 (348)	82 (59)	410 (314)	76 (65)

1. Incomplete trapping in all 4 years.

TABLE 7. Counts of grilse (1SW) and large salmon (MSW) at Mactaquac Dam, Saint John River system, 1970-89.

Year	Number of grilse	Number of large salmon	Total
1970	2,874	2,449	5,323
1971	1,592	2,235	3,827
1972	784	4,831	5,615
1973	1,854	2,367	4,221
1974	3,389	4,775	8,164
1975	5,725	6,200	11,925
1976	6,797	5,511	12,308
1977	3,507	7,247	10,754
1978	1,584	3,034	4,618
1979	6,234	1,993	8,227
1980	7,555	8,157	15,712
1981	4,571	2,441	7,012
1982	3,932	2,262	6,194
1983	3,623	1,712	5,335
1984	7,353	7,011	14,364
1985	5,331	6,391	11,722
1986	7,046	4,143	11,189
1987	8,000	3,530	11,530
1988	9,191	2,600	11,791
1989	9,587	4,291	13,878
Mean 1984-88	7,384	4,735	12,119

TABLE 8. Resident and non-resident Atlantic salmon angling license sales for New Brunswick (1972-89), Nova Scotia (1983-89) and Prince Edward Island (1983-89).

Year	New Brunswick ¹			Nova Scotia			Prince Edward Island ²
	Resident	Non-resident	Total	Resident	Non-resident	Total	Total
1972	8,557	3,540	12,097				
1973	10,148	4,317	14,465				
1974	11,174	4,480	15,654				
1975	12,820	4,008	16,828				
1976	14,809	3,948	18,757				
1977	16,805	4,447	21,252				
1978	16,718	4,423	21,141				
1979	16,765	4,074	20,839				
1980	16,266	4,367	20,633				
1981	16,890	5,074	21,964				
1982	17,950	4,585	22,535				
1983	17,717	4,680	22,397	6,722	876	7,598	321
1984	12,637	3,482	16,119	5,029	761	5,790	68
1985	13,620	4,158	17,778	5,299	788	6,087	117
1986	14,884	4,867	19,751	5,898	857	6,755	279
1987	15,300	5,202	20,502	6,242	935	7,177	461
1988	16,099	5,767	21,866	6,764	1,263	8,027	719
1989	29,555	6,547	36,102 ³	6,974	1,641	8,615	646

1. License sales figures obtained from N.B. Department of Natural Resources and Energy "FISHSYS" tables.

2. Resident and non-resident breakdown not available.

3. Large increase in 1989 due to change in licensing policy. (see footnote pg. 3)

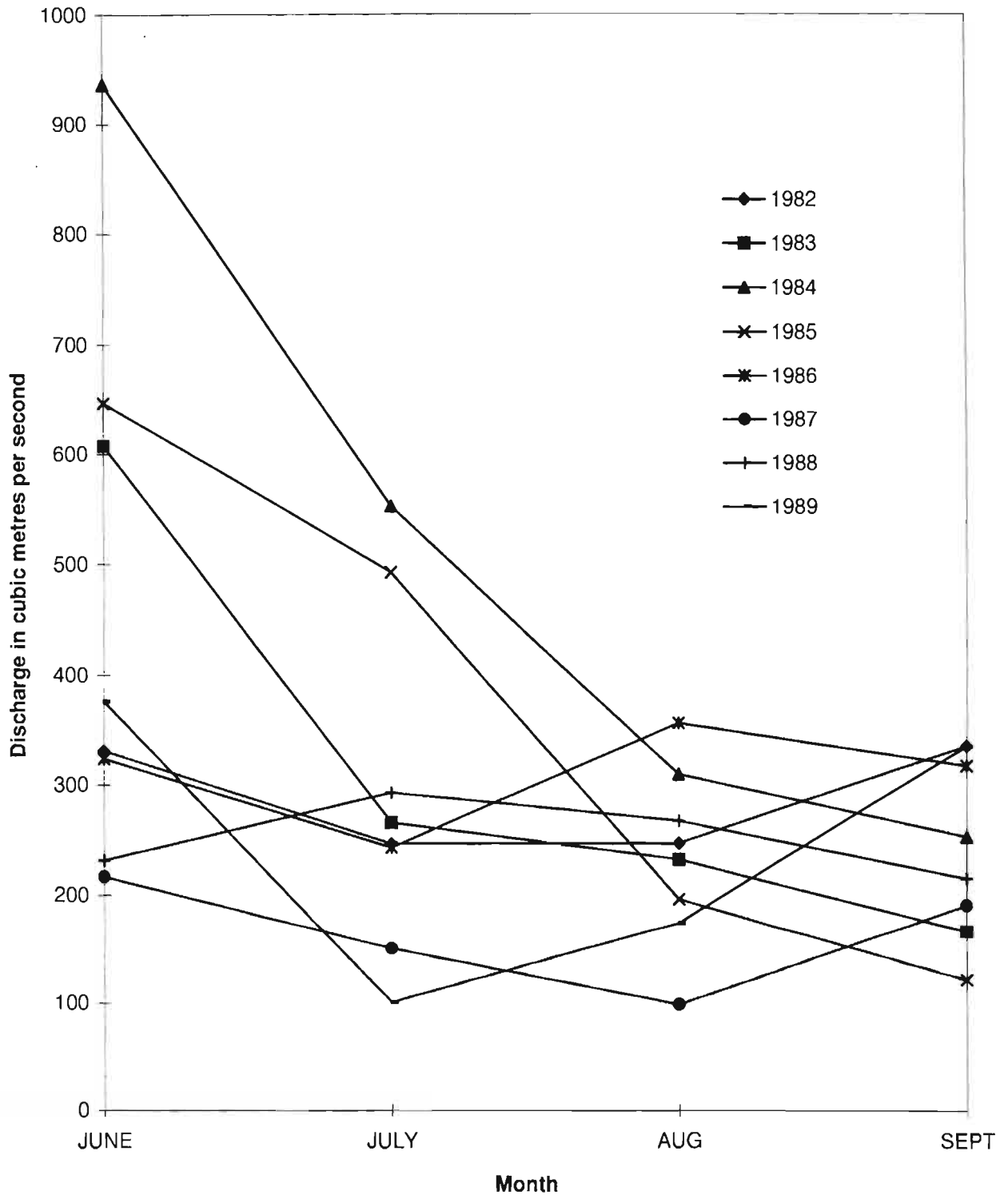


Fig. 1. Mean monthly discharge, June to Septmeber, summed for 12 rivers in New Brunswick and Nova Scotia for the years 1982-89. (Rivers: Bartibog, Kennebecasis, Magaguadavic, Nashwaak, Northwest Miramichi, Restigouche, Southwest Miramichi, Gold, LaHave, Musquodoboit, Northeast Margaree, and St. Mary's.)

Source: Anonymous, 1982, 1983,...,1989.

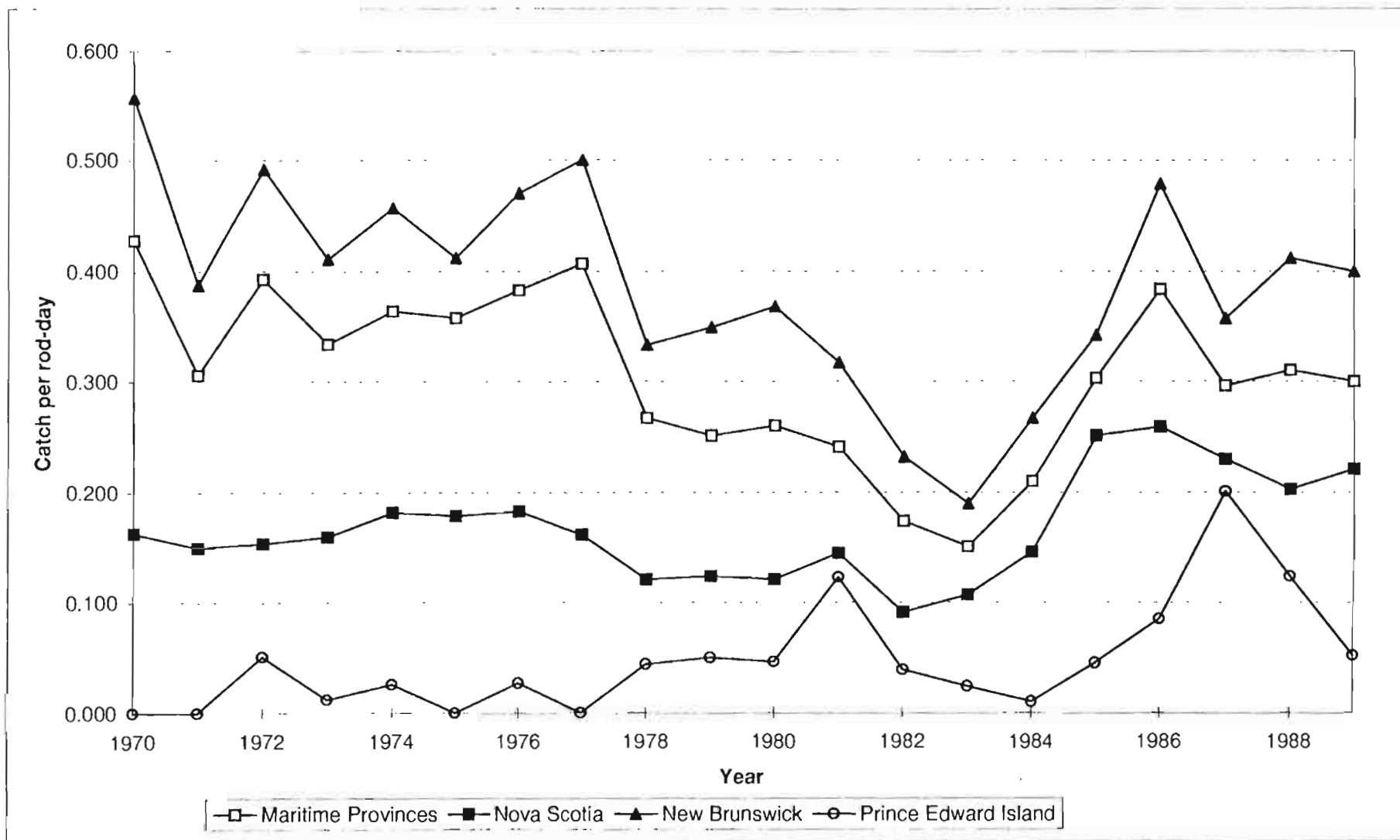


Figure 2. Catch per rod-day for New Brunswick, Nova Scotia, Prince Edward Island and the 3 provinces combined, 1970-1989.

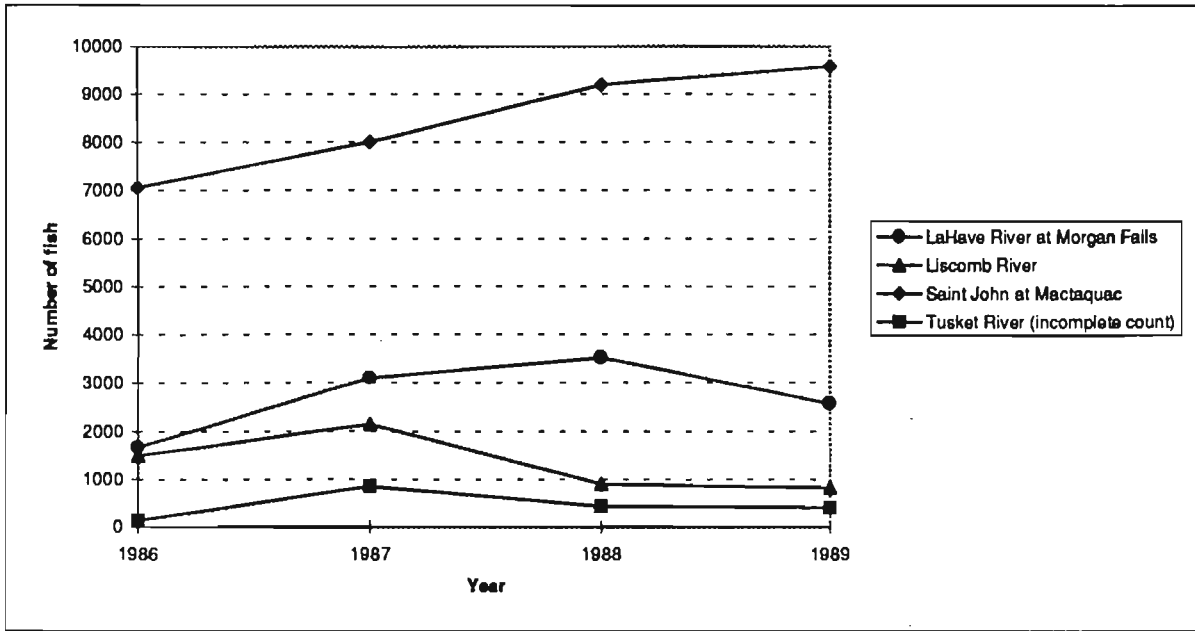


Figure 3. Counts of one-sea-winter Atlantic salmon at 4 counting facilities in the Maritime Provinces, 1986-1989.

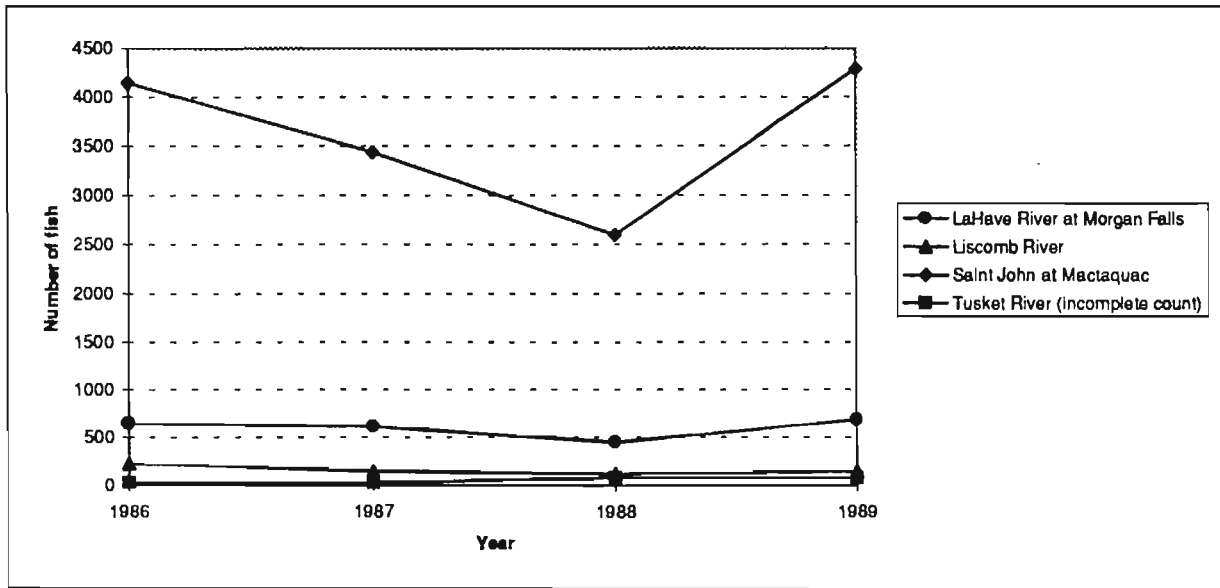


Figure 4. Counts of multi-sea-winter Atlantic salmon at 4 counting facilities in the Maritime Provinces, 1986-1989.

NEW BRUNSWICK AND
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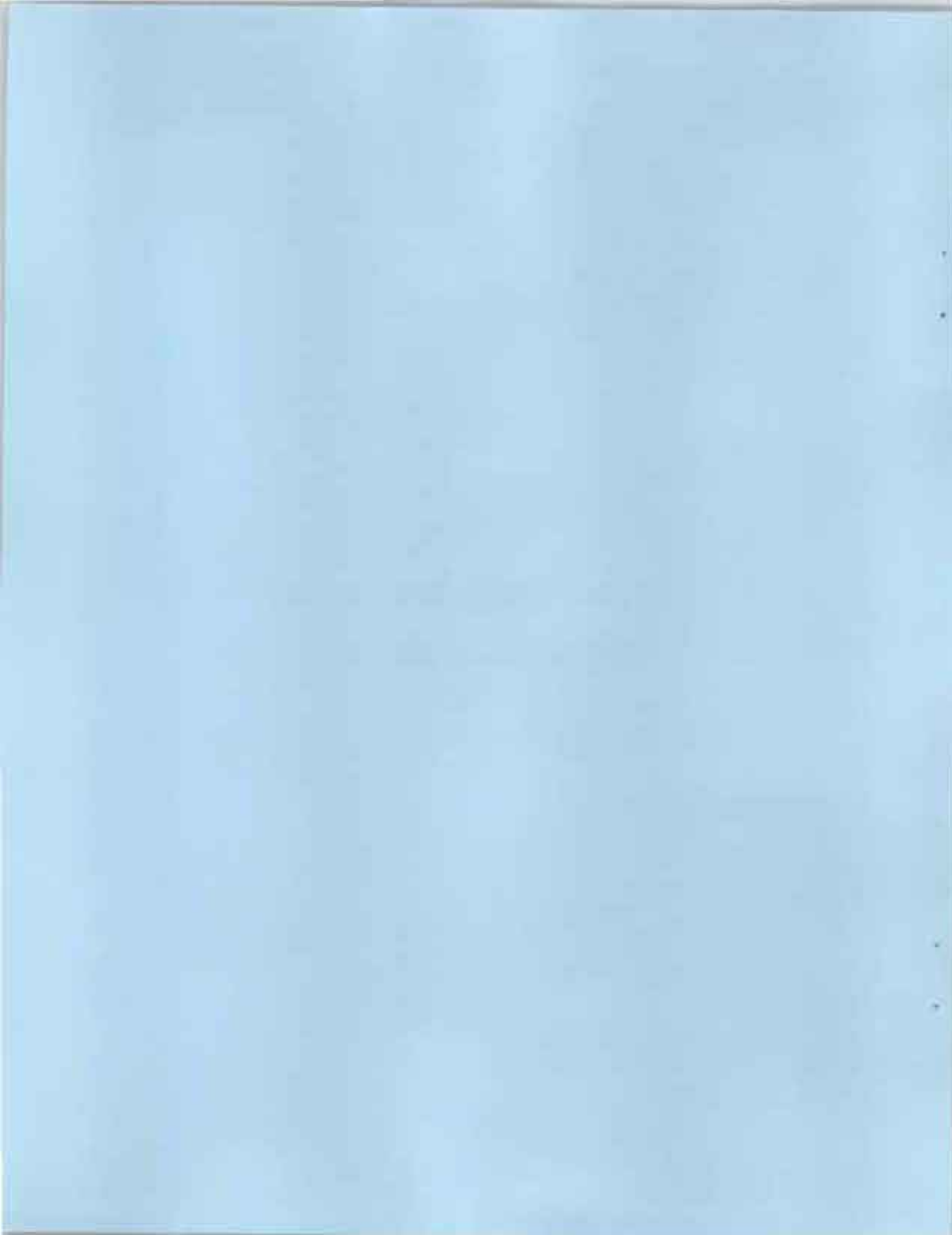


Table 9. Salmon angling season dates, New Brunswick and Prince Edward Island rivers, 1989.

River	Area	Kelts	Brights
Alma *		15 Apr - 15 May	15 Jun - 15 Oct
Bartholomew *		closed	closed
Bartibog		15 Apr - 15 May	1 Jun - 15 Oct
Big Salmon *	- upstream from and including WaltonDam Pool	15 Apr - 15 May	15 Jun - 15 Sep
	- downstream from Walton Dam Pool	15 Apr - 15 May	8 Jun - 22 Oct
Black (Saint John Co.)		15 Apr - 15 May	15 Jun - 15 Oct
Cains		15 Apr - 15 May	8 Jun - 15 Oct
Canaan		15 Apr - 15 May	15 Jun - 15 Oct
Coverdale		15 Apr - 15 May	15 Jun - 15 Oct
Digdeguash		15 Apr - 15 May	15 Jun - 15 Oct
Dungarvon		15 Apr - 15 May	8 Jun - 30 Sep
	- above Underwood Brook	15 Apr - 15 May	8 Jun - 15 Sep
Dunk (P.E.I.) *		No kelt fishery	9 Jun - 31 Oct
Hammond *	- upstream from and including French Village Bridge Pool	15 Apr - 15 May	15 Jun - 15 Oct
	- downstream from French Village Pool	15 Apr - 15 May	15 Jun - 31 Oct
Irish		15 Apr - 15 May	15 Jun - 15 Oct
Jacquet		15 Apr - 15 May	1 Jul - 15 Oct
Kedgwick		No kelt fishery	1 Jun - 31 Aug
Kennebecasis		15 Apr - 15 May	15 Jun - 31 Oct
Little		15 Apr - 15 May	15 Jun - 15 Oct
Little Southwest Miramichi		15 Apr - 15 May	8 Jun - 30 Sep
	- above Catamaran Brook	15 Apr - 15 May	8 Jun - 15 Sep
Magaguadavic		15 Apr - 15 May	15 Jun - 15 Oct
Middle (Gloucester Co.)		15 Apr - 15 May	1 Jul - 15 Oct
Midgell (P.E.I.) *		No kelt fishery	9 Jun - 31 Oct
Mill (P.E.I.) *		No kelt fishery	9 Jun - 31 Oct
Morell (P.E.I.) *		No kelt fishery	9 Jun - 15 Oct
Mosher		15 Apr - 15 May	15 Jun - 15 Oct
Nashwaak *	- upstream from bridge at Stanley	15 Apr - 15 May	15 Jun - 30 Sep
	- downstream from bridge at Stanley	15 Apr - 15 May	15 Jun - 15 Oct
		No kelt fishery	1 Jun - 7 Oct
Nepisiguit *		15 Apr - 15 May	15 Jun - 15 Oct
Nerepis		15 Apr - 15 May	15 Jun - 15 Oct
New		15 Apr - 15 May	15 Jun - 15 Oct
Northwest Miramichi *		15 Apr - 15 May	8 Jun - 30 Sep
	- above Little River	15 Apr - 15 May	8 Jun - 31 Aug
Oromocto		15 Apr - 15 May	15 Jun - 15 Oct
Patapedia		No kelt fishery	1 Jun - 31 Aug
Petitcodiac		15 Apr - 15 May	15 Aug - 15 Oct
Pocologan		15 Apr - 15 May	15 Jun - 15 Oct
Point Wolfe *		closed	closed
Pollett		15 Apr - 15 May	15 Jun - 15 Oct
Renous		15 Apr - 15 May	8 Jun - 30 Sep
	- above North Renous River	15 Apr - 15 May	8 Jun - 15 Sep
		No kelt fishery	1 Jun - 31 Aug
Restigouche		15 Apr - 15 May	15 Jun - 15 Sep
Saint Croix		15 Apr - 15 May	15 Jun - 30 Sep
Saint John *	- upstream from the Grafton Bridge in Woodstock	15 Apr - 15 May	15 Jun - 30 Sep
	- downstream from the Grafton Bridge in Woodstock	15 Apr - 15 May	1 Jun - 15 Oct
Salmon (Queens Co.)		15 Apr - 15 May	15 Jun - 15 Oct
Salmon (Victoria Co.)		15 Apr - 15 May	15 Jun - 15 Oct
Sevogle		15 Apr - 15 May	8 Jun - 30 Sep
	- above Square Forks	15 Apr - 15 May	8 Jun - 15 Sep
Shepody		15 Apr - 15 May	15 Jun - 15 Oct
Southwest Miramichi		15 Apr - 15 May	8 Jun - 30 Sep
	- Rocky Brook	15 Apr - 15 May	1 Jun - 31 Aug
	- above McKiel Brook and tributaries above Cains River	15 Apr - 15 May	8 Jun - 15 Sep
Tabusintac		15 Apr - 15 May	1 Jul - 22 Oct
Tetagouche		15 Apr - 15 May	1 Jul - 15 Oct
Tobique *		15 Apr - 15 May	15 Jun - 15 Sep
Tracadie		15 Apr - 15 May	1 Jul - 15 Oct
Upsalquitch		No kelt fishery	1 Jun - 31 Aug
Valleyfield (P.E.I.) *		No kelt fishery	9 Jun - 31 Oct
Waweig		15 Apr - 15 May	15 Jun - 15 Oct

TABLE 10. New Brunswick and Prince Edward Island variation orders, fishing prohibitions and special seasons.

Alma River	Closed to fishing in the Upper Salmon River (Alma River) from the highway bridge at Alma to the boundary for the Fundy National Park from July 17 to September 22, 1989.
Bartholomew River	Closed to fishing in those waters from its confluence with the Southwest Miramichi River to the forks of the north and south branches, excluding its branches and tributaries, from July 8 to December 31, 1989.
Big Salmon River	The daily catch and retention limit for salmon angling was 0 in any one day from June 13 to August 15, 1989.
Dunk River	Closed to fishing in those waters from a straight line drawn from grid reference 4853 3190 to grid reference 4853 3194 to a straight line drawn from grid reference 4861 3187 to grid reference 4861 3194 and including the highway bridge spanning the river on Route #110 (refer to Map Summerside 11 L/5) from June 23 to December 31, 1989.
Hammond River	Closed to fishing in those waters of Palmer Brook from its confluence with the Hammond River upstream 200 m to a point as marked by a fishery officer from July 13 to October 31, 1989.
Midgell River	Catch and release "only" season from October 1 to October 31, 1989.
Mill River	<ol style="list-style-type: none"> (1) Closed to fishing, in those waters between Cains Bridge on Highway #2 to the Canadian National Railway Bridge at Howlan, Prince County, from May 9 to May 23, 1989. (2) Closed to fishing, except by artificial fly, in those waters between Cains Bridge on Highway #2 to the Canadian National Railway Bridge at Howlan, Prince County, from June 23 to July 25, 1989. (3) Closed to fishing, except by artificial fly, in those waters upstream from Cains Bridge at Highway #2 to grid reference 3745 4745 at Highway #143 (known locally as Locke Road) from July 27 to December 31, 1989.
Morell River	<ol style="list-style-type: none"> (1) Closed to fishing in those waters of the West Branch downstream from the Highway #22 bridge and including Leard's Pond in the West Branch, and Hazelgreen Road in the East Branch and including the Main stream of the river, from May 9 to May 23, 1989. (2) Closed to fishing, except by artificial fly, in those waters of the West Branch, upstream of a straight line drawn from grid reference 2340 3565, to grid reference 2345 3570 (known locally as McKay's Pool) and including Leard's Pond, from June 9 to October 1, 1989. (3) Closed to fishing, except by artificial fly, in those waters of the West Branch, downstream from the Highway #22 bridge and including Leard's Pond in the West Branch, and Hazelgreen Road in the East Branch and including the Main stream, from June 23 to June 26, 1989. (4) Closed to fishing, except by artificial fly, in those waters upstream from a straight line drawn from grid reference 2345 3565 to grid reference 2345 3570 (known locally as McKay's Pool), the West Branch up to and including Leard's Pond and the East Branch below Hazelgreen Road, highway 329 from June 23 to October 1, 1989. (5) Catch and release "only" season from October 1 to October 15, 1989.

TABLE 10. New Brunswick and Prince Edward Island variation orders, fishing prohibitions and special seasons. (continued)

Nashwaak River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters in York County locally known as Ross Pool, and extending from a point located 150 m downstream of the mouth of Porters Brook to a point located 30 m upstream of the mouth of Porters Brook from June 1 to December 31, 1989. (2) Closed to fishing in those waters locally known as Big Basin Pool lying between a point at grid reference 4934 2893 and a point at grid reference 4952 2899 as shown on map Coldstream 21 J/6 of the National Topographic Series, scale 1:50,000, from June 15 to December 31, 1989. (3) Closed to fishing in those waters of Young's Brook within 15 m of its confluence with the Nashwaak River from July 27 to December 31, 1989. (4) Closed to fishing by means of hook, line and rod in those waters of the Nashwaak River and its tributaries upstream from its confluence with the Saint John River from July 27 to July 30, 1989.
Nepisiguit River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters from 100 m above to 100 m below the Nepisiguit trap counting fence from May 26 to December 31, 1989. (2) Closed to fishing in those waters from the head of Papineau Falls pool downstream for a distance of 45 m, to a point as marked by a fishery officer from May 26 to October 8, 1989.
Northwest Miramichi River	Closed to fishing in those waters from 100 m above to 100 m below the Miner's Bridge from June 1 to December 31, 1989.
Point Wolfe River	Closed to salmon angling in those waters from western boundary of Fundy National Park upstream, to the mouth of Tabor Brook from July 17 to December 31, 1989.
Saint John River	Closed to fishing in those waters in Carleton County lying between the highway bridge at Grafton and the railroad bridge at Upper Woodstock from June 15 to December 31, 1989.
Tobique River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters lying between a sign posted by a fishery officer at a point approximately 185 m downstream of a place locally known as the salmon dumping site at Gladwyn, and a sign posted by a fishery officer at a point approximately 90 m downstream of the mouth of Trout Brook from June 15 to December 31, 1989. (2) Closed to fishing in those waters of the Campbell River (right hand branch of the Tobique River) beginning at the mouth of the Mamozekel River upstream to a point 200 m above the Tobique Salmon Enhancement Project holding fence from July 1 to December 31, 1989.
Valleyfield River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters from its confluence with the Montague River to MacRaes Mill Dam on Highway #206, from May 9 to May 16, 1989. (2) Closed to fishing, except by artificial fly, in those waters from its confluence with the Montague River to MacRaes Mill Dam on Highway #206, from June 23 to June 26, 1989.

TABLE 11. Estimates of large salmon released by anglers on several New Brunswick rivers in 1989.¹

River	Number
Digdeguash	7
Jacquet	67
Kedgwick	528
Keswick	12
L.S.W. Miramichi	497
M.S.W. Miramichi ²	50
Magaguadavic	149
Nashwaak	214
Nepisiguit	490
Nerepis	2
New	1
N.W. Miramichi	727
Patapedia	35
Restigouche	2363
Saint Croix	20
Saint John ³	310
Sevogle	33
Tracadie	32
Upsalquitch	515
Waweig	11
Total	6063

1. Estimates of released fish not available on other New Brunswick rivers.
2. Estimate of released fish for Carleton Co. only. Data on released fish elsewhere on the Main Southwest Miramichi not available.
3. Partial estimate only based on apparent grilse to salmon ratios in sport catch.
(P. Cronin, NBDNR, pers. comm.)

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989.

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
ALMA 127								
<u>Bright Fish</u>								
September	15	31	0	0	15	31	86	0.174
October	5	10	0	0	5	10	29	0.172
Total	20	41	0	0	20	41	115 ²	0.174
BARTIBOG 19								
<u>Kelts</u>								
April	450	510	0	0	450	510	220	2.045
May	250	284	0	0	250	284	135	1.852
Total	700	794	0	0	700	794	355	1.972
<u>Bright Fish</u>								
August	8	11	0	0	8	11	60	0.133
September	40	54	0	0	40	54	215	0.186
October	120	163	0	0	120	163	300	0.400
Total	168	228	0	0	168	228	575	0.292
BIG SALMON 131								
<u>Bright Fish</u>								
June	10	20	0	0	10	20	35	0.286
July	65	133	0	0	65	133	381	0.171
August	30	61	0	0	30	61	242	0.124
September	34	69	0	0	34	69	182	0.187
October	11	22	0	0	11	22	26	0.423
Total	150	306	0	0	150	306	866	0.173
CAINS 146								
<u>Kelts</u>								
April	70	95	0	0	70	95	65	1.077
May	14	19	0	0	14	19	34	0.412
Total	84	114	0	0	84	114	99	0.848
<u>Bright Fish</u>								
July	102	139	0	0	102	139	320	0.319
August	501	909	0	0	501	909	896	0.559
September	460	714	0	0	460	714	700	0.657
October	528	740	0	0	528	740	2032	0.260
Total	1591	2502	0	0	1591	2502	3948	0.403

1. Retained fish per rod-day.

2. CUPE for other southern New Brunswick rivers was used to estimate effort.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
CANAAN 141								
<u>Bright Fish</u>								
June	0	0	0	0	0	0	5	0.000
July	1	2	0	0	1	2	9	0.111
August	1	2	0	0	1	2	6	0.167
September	3	6	0	0	3	6	9	0.333
October	1	2	0	0	1	2	3	0.333
Total	6	12	0	0	6	12	32	0.188
DENNIS 139b								
<u>Bright Fish</u>								
September	4	8	0	0	4	8	33	0.121
October	2	4	0	0	2	4	32	0.063
Total	6	12	0	0	6	12	65	0.092
DIGDEGUASH 139								
<u>Bright Fish</u>								
July	2	4	0	0	2	4	20	0.100
August	3	6	0	0	3	6	40	0.075
September	5	10	0	0	5	10	50	0.100
October	5	10	0	0	5	10	25	0.200
Total	15	31	0	0	15	31	135	0.111
DUNGARVON 148								
<u>Kelts</u>								
April	25	34	0	0	25	34	27	0.926
May	20	26	0	0	20	26	79	0.253
Total	45	60	0	0	45	60	106	0.425
<u>Bright Fish</u>								
June	36	54	0	0	36	54	197	0.183
July	140	181	0	0	140	181	663	0.211
August	159	281	0	0	159	281	532	0.299
September	199	304	0	0	199	304	604	0.329
Total	534	820	0	0	534	820	1996	0.268

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
HAMMOND 133a								
<u>Bright Fish</u>								
June	3	6	0	0	3	6	70	0.043
July	16	33	0	0	16	33	225	0.071
August	21	43	0	0	21	43	268	0.078
September	46	94	0	0	46	94	451	0.102
October	64	131	0	0	64	131	395	0.162
Total	150	306	0	0	150	306	1409	0.106
JACQUET 6								
<u>Kelts</u>								
April	5	7	0	0	5	7	60	0.083
May	8	11	0	0	8	11	105	0.076
Total	13	18	0	0	13	18	165	0.079
<u>Bright Fish</u>								
July	5	8	0	0	5	8	60	0.083
August	10	15	0	0	10	15	60	0.167
September	15	23	0	0	15	23	120	0.125
October	40	60	0	0	40	60	90	0.444
Total	70	106	0	0	70	106	330	0.212
KEDGWICK 1								
<u>Bright Fish</u>								
June	11	18	0	0	11	18	278	0.040
July	123	167	0	0	123	167	537	0.229
August	73	132	0	0	73	132	451	0.162
Total	207	317	0	0	207	317	1266	0.164
KENNEBECASIS 134								
<u>Bright Fish</u>								
June	6	12	0	0	6	12	86	0.070
July	22	45	0	0	22	45	248	0.089
August	36	73	0	0	36	73	352	0.102
September	20	41	0	0	20	41	219	0.091
October	16	33	0	0	16	33	47	0.340
Total	100	204	0	0	100	204	952	0.105

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
KESWICK 145								
<u>Bright Fish</u>								
June	0	0	0	0	0	0	5	0.000
July	5	10	0	0	5	10	20	0.250
August	5	10	0	0	5	10	25	0.200
September	10	20	0	0	10	20	50	0.200
October	5	10	0	0	5	10	30	0.167
Total	25	51	0	0	25	51	130	0.192
LITTLE SOUTHWEST MIRAMICHI 150								
<u>Kelts</u>								
April	187	254	0	0	187	254	125	1.496
May	101	138	0	0	101	138	347	0.291
Total	288	392	0	0	288	392	472	0.610
<u>Bright Fish</u>								
June	123	223	0	0	123	223	341	0.361
July	92	125	0	0	92	125	329	0.280
August	81	110	0	0	81	110	202	0.401
September	52	71	0	0	52	71	302	0.172
Total	348	529	0	0	348	529	1174	0.296
MAGAGUADAVIC 138								
<u>Bright Fish</u>								
July	4	8	0	0	4	8	90	0.044
August	15	31	0	0	15	31	100	0.150
September	100	204	0	0	100	204	380	0.263
October	60	122	0	0	60	122	200	0.300
Total	179	365	0	0	179	365	770	0.232
MIDDLE(Gloucester) 9								
<u>Kelts</u>								
May	25	45	0	0	25	45	80	0.313
<u>Bright Fish</u>								
July	10	18	0	0	10	18	65	0.154
August	8	15	0	0	8	15	42	0.190
September	10	18	0	0	10	18	55	0.182
October	25	45	0	0	25	45	125	0.200
Total	53	96	0	0	53	96	287	0.185

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
MIDGELL 41								
<u>Bright Fish</u>								
August	0	0	0	0	0	0	12	0.000
September	0	0	0	0	0	0	35	0.000
October	0	0	0	0	0	0	60	0.000
Total	0	0	0	0	0	0	107	0.000
MORELL 40								
<u>Bright Fish</u>								
June	4	7	0	0	4	7	594	0.007
July	39	71	0	0	39	71	1829	0.021
August	28	51	0	0	28	51	868	0.032
September	96	174	0	0	96	174	960	0.100
October	0	0	0	0	0	0	255	0.000
Total	167	303	0	0	167	303	4506	0.037
NASHWAAK 144								
<u>Kelts</u>								
April	N/A		0	0	N/A		70	
May	N/A		0	0	N/A		120	
Total	N/A		0	0	N/A		190	
<u>Bright Fish</u>								
June	19	39	0	0	19	39	580	0.033
July	64	131	0	0	64	131	960	0.067
August	95	194	0	0	95	194	660	0.144
September	200	408	0	0	200	408	990	0.202
October	70	143	0	0	70	143	350	0.200
Total	448	914	0	0	448	914	3540	0.127
NEPISIGUIT 11								
<u>Bright Fish</u>								
June	15	27	0	0	15	27	400	0.038
July	50	90	0	0	50	90	500	0.100
August	50	90	0	0	50	90	400	0.125
September	385	700	0	0	385	700	2000	0.193
October	100	180	0	0	100	180	700	0.143
Total	600	1087	0	0	600	1087	4000	0.150

1. Retained fish per rod-day.

N/A = not available

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
NEREPIS 135a								
<u>Bright Fish</u>								
August	0	0	0	0	0	0	50	0.000
September	4	8	0	0	4	8	100	0.040
October	4	8	0	0	4	8	120	0.033
Total	8	16	0	0	8	16	270	0.030
NEW 136								
<u>Bright Fish</u>								
August	3	6	0	0	3	6	10	0.300
NORTHWEST MIRAMICHI 152								
<u>Kelts</u>								
April	418	569	0	0	418	569	111	3.766
May	651	886	0	0	651	886	409	1.592
Total	1069	1455	0	0	1069	1455	520	2.056
<u>Bright Fish</u>								
June	53	72	0	0	53	72	813	0.065
July	57	78	0	0	57	78	817	0.070
August	46	63	0	0	46	63	682	0.067
September	57	78	0	0	57	78	518	0.110
Total	213	291	0	0	213	291	2830	0.075
OROMOCTO 142								
<u>Bright Fish</u>								
August	0	0	0	0	0	0	10	0.000
September	0	0	0	0	0	0	20	0.000
October	0	0	0	0	0	0	20	0.000
Total	0	0	0	0	0	0	50	0.000
PATAPEDIA 2a								
<u>Bright Fish</u>								
June	5	9	0	0	5	9	43	0.116
July	25	45	0	0	25	45	106	0.236
August	1	2	0	0	1	2	62	0.016
Total	31	56	0	0	31	56	211	0.147

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
POCOLOGAN 137								
<u>Bright Fish</u>								
August	2	4	0	0	0	0	20	0.000
RENOUS 149								
<u>Kelts</u>								
April	109	150	0	0	109	150	241	0.452
May	73	106	0	0	73	106	252	0.290
Total	182	256	0	0	182	256	493	0.369
<u>Bright Fish</u>								
June	124	216	0	0	124	216	454	0.273
July	493	748	0	0	493	748	1883	0.262
August	505	894	0	0	505	894	1159	0.436
September	690	1084	0	0	690	1084	1612	0.428
Total	1812	2942	0	0	1812	2942	5108	0.355
RESTIGOUCHE 2								
<u>Bright Fish</u>								
June	87	151	0	0	87	151	1697	0.051
July	1119	2031	0	0	1119	2031	2623	0.427
August	571	986	0	0	571	986	1784	0.320
Total	1777	3168	0	0	1777	3168	6104	0.291
SAINT CROIX (CHARLOTTE) 140								
<u>Bright Fish</u>								
June	7	13	0	0	7	13	50	0.140
July	15	30	0	0	15	30	340	0.044
August	0	0	0	0	0	0	41	0.000
September	3	6	0	0	3	6	19	0.158
Total	25	49	0	0	25	49	450	0.056

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
SAINT JOHN 135								
<u>Bright Fish</u>								
June	97	198	0	0	97	198	1454	0.067
July	670	1367	0	0	670	1367	3761	0.178
August	205	418	0	0	205	418	1710	0.120
September	97	198	0	0	97	198	1454	0.067
October	11	22	0	0	11	22	171	0.064
Total	1080	2203	0	0	1080	2203	8550	0.126
SALMON (VICTORIA CO.) 154								
<u>Bright Fish</u>								
June	1	2	0	0	1	2	12	0.083
July	72	147	0	0	72	147	864	0.083
August	11	22	0	0	11	22	132	0.083
September	16	33	0	0	16	33	192	0.083
Total	100	204	0	0	100	204	1200	0.083
SALMON (QUEENS CO.) 143								
<u>Bright Fish</u>								
July	22	45	0	0	22	45	126	0.175
August	30	61	0	0	30	61	173	0.173
September	11	22	0	0	11	22	65	0.169
October	12	24	0	0	12	24	69	0.174
Total	75	153	0	0	75	153	433 ²	0.173
SEVOGLE 151								
<u>Bright Fish</u>								
June	29	53	0	0	29	53	283	0.102
July	34	46	0	0	34	46	247	0.138
August	22	30	0	0	22	30	222	0.099
September	18	24	0	0	18	24	185	0.097
Total	103	153	0	0	103	153	937	0.110

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
SOUTHWEST MIRAMICHI 20								
<u>Kelts</u>								
April	3267	4332	0	0	3267	4332	3592	0.910
May	884	1026	0	0	884	1026	2037	0.434
Total	4151	5358	0	0	4151	5358	5629	0.737
<u>Bright Fish</u>								
June	389	611	0	0	389	611	814	0.478
July	1618	2411	0	0	1618	2411	4887	0.331
August	1375	2495	0	0	1375	2495	3939	0.349
September	4682	8239	0	0	4682	8239	5478	0.855
Total	8064	13756	0	0	8064	13756	15118	0.533
TABUSINTAC 18								
<u>Kelts</u>								
April	452	564	0	0	452	564	935	0.483
May	110	150	0	0	110	150	252	0.437
Total	562	714	0	0	562	714	1187	0.473
<u>Bright Fish</u>								
July	4	7	0	0	4	7	40	0.100
August	12	19	0	0	12	19	60	0.200
September	65	73	0	0	65	73	260	0.250
October	57	103	0	0	57	103	291	0.196
Total	138	202	0	0	138	202	651	0.212
TETAGOUCHE 8								
<u>Kelts</u>								
May	10	18	0	0	10	18	65	0.154
<u>Bright Fish</u>								
July	10	18	0	0	10	18	65	0.154
August	9	16	0	0	9	16	45	0.200
September	10	18	0	0	10	18	55	0.182
October	25	45	0	0	25	45	125	0.200
Total	54	97	0	0	54	97	290	0.186

1. Retained fish per rod-day.

TABLE 12. Sport catch by river for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
TOBIQUE 153								
<u>Bright Fish</u>								
June	16	33	0	0	16	33	511	0.031
July	670	1367	0	0	670	1367	5985	0.112
August	134	273	0	0	134	273	657	0.204
September	17	35	0	0	17	35	146	0.116
Total	837	1707	0	0	837	1707	7299	0.115
TRACADIE 17								
<u>Kelts</u>								
April	2	5	0	0	2	5	41	0.049
<u>Bright Fish</u>								
July	5	9	0	0	5	9	33	0.152
August	8	16	0	0	8	16	91	0.088
September	6	11	0	0	6	11	39	0.154
October	5	11	0	0	5	11	57	0.088
Total	24	47	0	0	24	47	220	0.109
UPSALQUITCH 3								
<u>Bright Fish</u>								
June	63	109	0	0	63	109	282	0.223
July	505	916	0	0	505	916	915	0.552
August	268	461	0	0	268	461	607	0.442
Total	836	1486	0	0	836	1486	1804	0.463
WAWEIG 139a								
<u>Bright Fish</u>								
September	10	20	0	0	10	20	175	0.057

1. Retained fish per rod-day.

TABLE 13. Sport catch by river system for New Brunswick and Prince Edward Island, 1989.

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
<u>Miramichi River System</u>								
<u>Kelts</u>								
April	4076	5434	0	0	4076	5434	4161	0.980
May	1743	2201	0	0	1743	2201	3158	0.552
Total	5819	7635	0	0	5819	7635	7319	0.795
<u>Bright Fish</u>								
June	754	1229	0	0	754	1229	2902	0.260
July	2536	3728	0	0	2536	3728	9146	0.277
August	2689	4782	0	0	2689	4782	7632	0.352
September	6158	10514	0	0	6158	10514	9399	0.655
October	528	740	0	0	528	740	2032	0.260
Total	12665	20993	0	0	12665	20993	31111	0.407
<u>Restigouche River System</u>								
<u>Bright Fish</u>								
June	166	287	0	0	166	287	2300	0.072
July	1772	3159	0	0	1772	3159	4181	0.424
August	913	1581	0	0	913	1581	2904	0.314
Total	2851	5027	0	0	2851	5027	9385	0.304
<u>Saint John River System</u>								
<u>Kelts</u>								
April	N/A		0	0	N/A		70	
May	N/A		0	0	N/A		120	
Total	N/A		0	0	N/A		190	
<u>Bright Fish</u>								
June	142	290	0	0	142	290	2723	0.052
July	1542	3146	0	0	1542	3146	12198	0.126
August	538	1098	0	0	538	1098	4043	0.133
September	424	865	0	0	424	865	3696	0.115
October	183	373	0	0	183	373	1205	0.152
Total	2829	5771	0	0	2829	5771	23865	0.119

1. Retained fish per rod-day.

N/A = not available

TABLE 14. Sport catch by district for New Brunswick and Prince Edward Island, 1989.

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
District 48								
<u>Bright Fish</u>								
June	107	218	0	0	107	218	1489	0.072
July	735	1499	0	0	735	1499	4142	0.177
August	235	479	0	0	235	479	1952	0.120
September	131	267	0	0	131	267	1636	0.080
October	22	45	0	0	22	45	197	0.112
Total	1230	2509	0	0	1230	2509	9416	0.131
District 52								
<u>Bright Fish</u>								
June	7	13	0	0	7	13	50	0.140
July	21	42	0	0	21	42	450	0.047
August	18	37	0	0	18	37	181	0.099
September	122	249	0	0	122	249	657	0.186
October	67	137	0	0	67	137	257	0.261
Total	235	477	0	0	235	477	1595	0.147
District 53								
<u>Bright Fish</u>								
August	5	10	0	0	5	10	30	0.167
District 55								
<u>Bright Fish</u>								
June	9	18	0	0	9	18	156	0.058
July	38	78	0	0	38	78	473	0.080
August	57	116	0	0	57	116	670	0.085
September	70	143	0	0	70	143	770	0.091
October	84	171	0	0	84	171	562	0.149
Total	258	526	0	0	258	526	2631	0.098
District 56								
<u>Bright Fish</u>								
June	0	0	0	0	0	0	5	0.000
July	23	47	0	0	23	47	135	0.170
August	31	63	0	0	31	63	179	0.173
September	14	29	0	0	14	29	74	0.189
October	13	27	0	0	13	27	72	0.181
Total	81	165	0	0	81	165	465	0.174

1. Retained fish per rod-day.

TABLE 14. Sport catch by district for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		<u>Effort</u> (rod-days)	<u>Catch/effort¹</u> (fish/rod-day)
	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>		
District 57								
<u>Bright Fish</u>								
August	0	0	0	0	0	0	10	0.000
September	0	0	0	0	0	0	20	0.000
October	0	0	0	0	0	0	20	0.000
Total	0	0	0	0	0	0	50	0.000
District 58								
<u>Kelts</u>								
April	N/A		0	0	N/A		70	
May	N/A		0	0	N/A		120	
Total	N/A		0	0	N/A		190	
<u>Bright Fish</u>								
June	19	39	0	0	19	39	585	0.032
July	69	141	0	0	69	141	980	0.070
August	100	204	0	0	100	204	685	0.146
September	210	428	0	0	210	428	1040	0.202
October	75	153	0	0	75	153	380	0.197
Total	473	965	0	0	473	965	3670	0.129
District 60								
<u>Bright Fish</u>								
June	17	35	0	0	17	35	523	0.033
July	742	1514	0	0	742	1514	6849	0.108
August	145	296	0	0	145	296	789	0.184
September	33	67	0	0	33	67	338	0.098
Total	937	1911	0	0	937	1911	8499	0.110

1. Retained fish per rod-day.

N/A = not available

TABLE 14. Sport catch by district for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
District 63								
<u>Kelts</u>								
April	5	7	0	0	5	7	60	0.083
May	8	11	0	0	8	11	105	0.076
Total	13	18	0	0	13	18	165	0.079
<u>Bright Fish</u>								
June	166	287	0	0	166	287	2300	0.072
July	1777	3167	0	0	1777	3167	4241	0.419
August	923	1596	0	0	923	1596	2964	0.311
September	15	23	0	0	15	23	120	0.125
October	40	60	0	0	40	60	90	0.444
Total	2921	5133	0	0	2921	5133	9715	0.301
District 64								
<u>Kelts</u>								
May	35	63	0	0	35	63	145	0.241
<u>Bright Fish</u>								
June	15	27	0	0	15	27	400	0.038
July	70	126	0	0	70	126	630	0.111
August	67	121	0	0	67	121	487	0.138
September	405	736	0	0	405	736	2110	0.192
October	150	270	0	0	150	270	950	0.158
Total	707	1280	0	0	707	1280	4577	0.154
District 68								
<u>Kelts</u>								
April	2	5	0	0	2	5	41	0.049
<u>Bright Fish</u>								
July	5	9	0	0	5	9	33	0.152
August	8	16	0	0	8	16	91	0.088
September	6	11	0	0	6	11	39	0.154
October	5	11	0	0	5	11	57	0.088
Total	24	47	0	0	24	47	220	0.109

1. Retained fish per rod-day.

TABLE 14. Sport catch by district for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
District 70								
<u>Kelts</u>								
April	452	564	0	0	452	564	935	0.483
May	110	150	0	0	110	150	252	0.437
Total	562	714	0	0	562	714	1187	0.473
<u>Bright Fish</u>								
July	4	7	0	0	4	7	40	0.100
August	12	19	0	0	12	19	60	0.200
September	65	73	0	0	65	73	260	0.250
October	57	103	0	0	57	103	291	0.196
Total	138	202	0	0	138	202	651	0.212
District 71								
<u>Kelts</u>								
April	450	510	0	0	450	510	220	2.045
May	250	284	0	0	250	284	135	1.852
Total	700	794	0	0	700	794	355	1.972
<u>Bright Fish</u>								
August	8	11	0	0	8	11	60	0.133
September	40	54	0	0	40	54	215	0.186
October	120	163	0	0	120	163	300	0.400
Total	168	228	0	0	168	228	575	0.292
District 72								
<u>Kelts</u>								
April	4076	5434	0	0	4076	5434	4161	0.980
May	1743	2201	0	0	1743	2201	3158	0.552
Total	5819	7635	0	0	5819	7635	7319	0.795
<u>Bright Fish</u>								
June	754	1229	0	0	754	1229	2902	0.260
July	2536	3728	0	0	2536	3728	9146	0.277
August	2689	4782	0	0	2689	4782	7632	0.352
September	6158	10514	0	0	6158	10514	9399	0.655
October	528	740	0	0	528	740	2032	0.260
Total	12665	20993	0	0	12665	20993	31111	0.407

1. Retained fish per rod-day.

TABLE 14. Sport catch by district for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		<u>Effort</u> (rod-days)	<u>Catch/effort¹</u> (fish/rod-day)
	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>		
District 79								
<u>Bright Fish</u>								
September	15	31	0	0	15	31	86	0.174
October	5	10	0	0	5	10	29	0.172
Total	20	41	0	0	20	41	115	0.174
District 88								
<u>Bright Fish</u>								
June	4	7	0	0	4	7	594	0.007
July	39	71	0	0	39	71	1829	0.021
August	28	51	0	0	28	51	880	0.032
September	96	174	0	0	96	174	995	0.096
October	0	0	0	0	0	0	315	0.000
Total	167	303	0	0	167	303	4613	0.036

1. Retained fish per rod-day.

TABLE 15. Sport catch by county for New Brunswick and Prince Edward Island, 1989.

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
Albert Co., N.B.								
<u>Bright Fish</u>								
September	15	31	0	0	15	31	86	0.174
October	5	10	0	0	5	10	29	0.172
Total	20	41	0	0	20	41	115	0.174
Carleton Co., N.B.								
<u>Kelts</u>								
April	10	13	0	0	10	13	18	0.556
May	3	4	0	0	3	4	10	0.300
Total	13	17	0	0	13	17	28	0.464
<u>Bright Fish</u>								
June	40	74	0	0	40	74	247	0.162
July	244	458	0	0	244	458	848	0.288
August	118	226	0	0	118	226	513	0.230
September	240	432	0	0	240	432	595	0.403
October	1	2	0	0	1	2	33	0.030
Total	643	1192	0	0	643	1192	2236	0.288
Charlotte Co., N.B.								
<u>Bright Fish</u>								
June	7	13	0	0	7	13	50	0.140
July	21	42	0	0	21	42	450	0.047
August	23	47	0	0	23	47	211	0.109
September	122	249	0	0	122	249	657	0.186
October	67	137	0	0	67	137	257	0.261
Total	240	488	0	0	240	488	1625	0.148

1. Retained fish per rod-day.

TABLE 15. Sport catch by county for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
Gloucester Co., N.B.								
<u>Kelts</u>								
April	2	5	0	0	2	5	41	0.049
May	35	63	0	0	35	63	145	0.241
Total	37	68	0	0	37	68	186	0.199
<u>Bright Fish</u>								
June	15	27	0	0	15	27	400	0.038
July	75	135	0	0	75	135	663	0.113
August	75	137	0	0	75	137	578	0.130
September	411	747	0	0	411	747	2149	0.191
October	155	281	0	0	155	281	1007	0.154
Total	731	1327	0	0	731	1327	4797	0.152
Kings Co., N.B.								
<u>Bright Fish</u>								
June	9	18	0	0	9	18	156	0.058
July	38	78	0	0	38	78	473	0.080
August	57	116	0	0	57	116	670	0.085
September	70	143	0	0	70	143	770	0.091
October	84	171	0	0	84	171	562	0.149
Total	258	526	0	0	258	526	2631	0.098
Northumberland Co., N.B.								
<u>Kelts</u>								
April	4847	6336	0	0	4847	6336	5065	0.957
May	2068	2593	0	0	2068	2593	3402	0.608
Total	6915	8929	0	0	6915	8929	8467	0.817
<u>Bright Fish</u>								
June	618	1013	0	0	618	1013	2650	0.233
July	1974	2888	0	0	1974	2888	7671	0.257
August	2228	3939	0	0	2228	3939	6531	0.341
September	4624	7742	0	0	4624	7742	8176	0.566
October	705	1006	0	0	705	1006	2623	0.269
Total	10149	16588	0	0	10149	16588	27651	0.367

1. Retained fish per rod-day.

TABLE 15. Sport catch by county for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
Queens Co., N.B.								
<u>Bright Fish</u>								
June	0	0	0	0	0	0	5	0.000
July	23	47	0	0	23	47	135	0.170
August	31	63	0	0	31	63	179	0.173
September	14	29	0	0	14	29	74	0.189
October	13	27	0	0	13	27	72	0.181
Total	81	165	0	0	81	165	465	0.174
Restigouche Co., N.B.								
<u>Kelts</u>								
April	5	7	0	0	5	7	60	0.083
May	8	11	0	0	8	11	105	0.076
Total	13	18	0	0	13	18	165	0.079
<u>Bright Fish</u>								
June	166	287	0	0	166	287	2300	0.072
July	1777	3167	0	0	1777	3167	4241	0.419
August	923	1596	0	0	923	1596	2964	0.311
September	15	23	0	0	15	23	120	0.125
October	40	60	0	0	40	60	90	0.444
Total	2921	5133	0	0	2921	5133	9715	0.301
Saint John Co., N.B.								
<u>Bright Fish</u>								
June	10	20	0	0	10	20	35	0.286
July	65	133	0	0	65	133	381	0.171
August	30	61	0	0	30	61	242	0.124
September	34	69	0	0	34	69	182	0.187
October	11	22	0	0	11	22	26	0.423
Total	150	306	0	0	150	306	866	0.173
Sunbury Co., N.B.								
<u>Bright Fish</u>								
August	0	0	0	0	0	0	10	0.000
September	0	0	0	0	0	0	20	0.000
October	0	0	0	0	0	0	20	0.000
Total	0	0	0	0	0	0	50	0.000

1. Retained fish per rod-day.

TABLE 15. Sport catch by county for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		<u>Effort</u> (rod-days)	<u>Catch/effort¹</u> (fish/rod-day)
	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>		
Victoria Co., N.B.								
<u>Bright Fish</u>								
June	17	35	0	0	17	35	523	0.033
July	742	1514	0	0	742	1514	6849	0.108
August	145	296	0	0	145	296	789	0.184
September	33	67	0	0	33	67	338	0.098
Total	937	1911	0	0	937	1911	8499	0.110
York Co., N.B.								
<u>Kelts</u>								
April	121	159	0	0	121	159	303	0.399
May	32	38	0	0	32	38	253	0.126
Total	153	197	0	0	153	197	556	0.275
<u>Bright Fish</u>								
June	212	379	0	0	212	379	2044	0.104
July	1061	1897	0	0	1061	1897	5408	0.196
August	668	1269	0	0	668	1269	3103	0.215
September	1706	3093	0	0	1706	3093	3597	0.474
October	85	173	0	0	85	173	518	0.164
Total	3732	6811	0	0	3732	6811	14670	0.254
Kings Co., P.E.I.								
<u>Bright Fish</u>								
June	4	7	0	0	4	7	594	0.007
July	39	71	0	0	39	71	1829	0.021
August	28	51	0	0	28	51	880	0.032
September	96	174	0	0	96	174	995	0.096
October	0	0	0	0	0	0	315	0.000
Total	167	303	0	0	167	303	4613	0.036

1. Retained fish per rod-day.

TABLE 16. Sport catch by Salmon Fishing Area for New Brunswick and Prince Edward Island, 1989. (continued)

	<u>Grilse</u>		<u>Large salmon</u>		<u>Total</u>		<u>Effort</u> (rod-days)	<u>Catch/effort¹</u> (fish/rod-day)
	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>	<u>Number</u>	<u>Wt(kg)</u>		
Salmon fishing area 15								
<u>Kelts</u>								
April	7	12	0	0	7	12	101	0.069
May	43	74	0	0	43	74	250	0.172
Total	50	86	0	0	50	86	351	0.142
<u>Bright Fish</u>								
June	181	314	0	0	181	314	2700	0.037
July	1852	3302	0	0	1852	3302	4904	0.378
August	998	1733	0	0	998	1733	3542	0.282
September	426	770	0	0	426	770	2269	0.188
October	195	341	0	0	195	341	1097	0.178
Total	3652	6460	0	0	3652	6460	14512	0.252
Salmon fishing area 16								
<u>Kelts</u>								
April	4978	6508	0	0	4978	6508	5316	0.936
May	2103	2635	0	0	2103	2635	3545	0.593
Total	7081	9143	0	0	7081	9143	8861	0.799
<u>Bright Fish</u>								
June	754	1229	0	0	754	1229	2902	0.260
July	2540	3735	0	0	2540	3735	9186	0.277
August	2709	4812	0	0	2709	4812	7752	0.349
September	6263	10641	0	0	6263	10641	9874	0.634
October	705	1006	0	0	705	1006	2623	0.269
Total	12971	21423	0	0	12971	21423	32337	0.401
Salmon fishing area 23								
<u>Kelts</u>								
April	N/A		0	0	N/A		70	
May	N/A		0	0	N/A		120	
Total	N/A		0	0	N/A		190	
<u>Bright Fish</u>								
June	159	323	0	0	159	323	2808	0.057
July	1628	3321	0	0	1628	3321	13029	0.125
August	591	1206	0	0	591	1206	4496	0.131
September	595	1214	0	0	595	1214	4621	0.129
October	266	543	0	0	266	543	1517	0.175
Total	3239	6611	0	0	3239	6611	26471	0.122

1. Retained fish per rod-day.

N/A = not available

TABLE 16. Sport catch by Salmon Fishing Area for New Brunswick and Prince Edward Island, 1989. (continued)

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
Salmon fishing area 17								
<u>Bright Fish</u>								
June	4	7	0	0	4	7	594	0.007
July	39	71	0	0	39	71	1829	0.021
August	28	51	0	0	28	51	880	0.032
September	96	174	0	0	96	174	995	0.096
October	0	0	0	0	0	0	315	0.000
Total	167	303	0	0	167	303	4613	0.039

TABLE 17. Sport catch by province for New Brunswick and Prince Edward Island, 1989.

	Grilse		Large salmon		Total		Effort (rod-days)	Catch/effort ¹ (fish/rod-day)
	Number	Wt(kg)	Number	Wt(kg)	Number	Wt(kg)		
New Brunswick								
<u>Kelts</u>								
April	4985	6520	0	0	4985	6520	5487	0.909
May	2146	2709	0	0	2146	2709	3915	0.548
Total	7131	9229	0	0	7131	9229	9402	0.758
<u>Bright Fish</u>								
June	1094	1866	0	0	1094	1866	8410	0.130
July	6020	10358	0	0	6020	10358	27119	0.222
August	4298	7751	0	0	4298	7751	15790	0.272
September	7284	12625	0	0	7284	12625	16764	0.435
October	1166	1890	0	0	1166	1890	5237	0.223
Total	19862	34489	0	0	19862	34489	73320	0.271
Prince Edward Island								
<u>Bright Fish</u>								
June	4	7	0	0	4	7	594	0.007
July	39	71	0	0	39	71	1829	0.021
August	28	51	0	0	28	51	880	0.032
September	96	174	0	0	96	174	995	0.096
October	0	0	0	0	0	0	315	0.000
Total	167	303	0	0	167	303	4613	0.039

1. Retained fish per rod-day.

NOVA SCOTIA

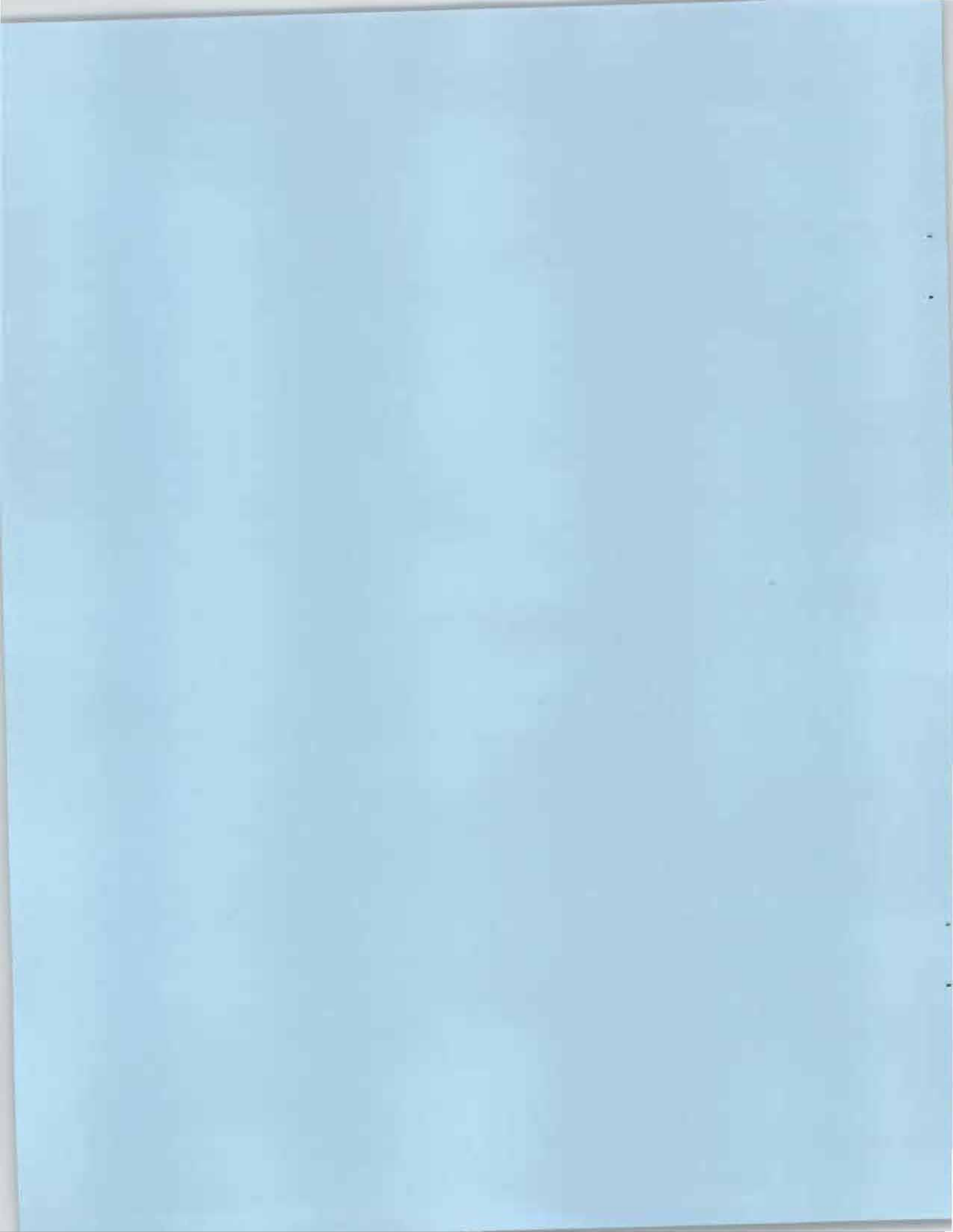


TABLE 18. 1989 Nova Scotia Atlantic salmon recreational catch summary data.

CATCH = .862: EFFORT = .89

Number of licenses issued in 1989	8615
Number of license stubs returned	6307
Overall response rate	73%
Number of unspoiled stubs used in analysis	6138

Number of	Observed number	Percent observed	Estimated number
resident anglers	5,086	83	6,974 ¹
non-resident anglers	1,052	17	1,641 ¹
anglers who fished	5,293	86	7,429
anglers who did not fish	845	14	1,185
successful anglers	2,751	45	3,860
unsuccessful anglers	2,542	41	3,568
rod days fished in season	66,146		
rod days fished by successful anglers	48,742		
rod days fished by unsuccessful anglers	17,404		
rod days per angler ²	12.50		
rivers fished per angler ²	1.64		
fish retained	7,559	9,145	
grilse retained	7,559	9,145	
large salmon retained	0	0	
fish released	7,044	8,522	
grilse released	1,291	1,562	
large salmon released	5,753	6,960	
fish angled (retained & released)	14,603	17,667	
fish per rod day	0.221		
fish per angler ²	2.379		
fish per licensee	1.695		

1. Actual number, not estimated.

2. Calculations are based on licensees who fished.

River		Season dates		Observed	Numbers retained												Numbers released				
					Grilse			Salmon			Unknown	Totals		Grilse		Salmon					
					Begin	End	No. of	Obs.	Estimated		Obs.	Estimated	Obs.	Obs.	Estimated	Obs.	Est.	Obs.	Est.		
Code	Name	D	M	D	M	anglers	No.	No.	kg	No.	No.	kg	No.	No.	No.	kg	Obs.	Est.	Obs.	Est.	
75	Nine Mile	10/05		15/08		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	North Colchester	15/08		31/10	*	72	106	128	210	0	0	0	0	106	128	210	11	13	8	10	
77	North Victoria Co	1/06		15/10	*	162	101	122	187	0	0	0	0	101	122	187	33	40	331	400	
78	North Aspy	15/06		15/10		24	4	5	8	0	0	0	0	4	5	8	2	2	27	33	
120	Northwest Brook (Riv	15/06		15/10		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	Paradise Brook	15/08		31/10		0															
80	Petite Riviere	15/06		15/08	*	67	141	171	307	0	0	0	0	141	171	307	23	28	17	21	
81	Pomquet	1/09		31/10		1	1	1	2	0	0	0	0	1	1	2	0	0	1	1	
83	Port Dufferin	1/06		29/08		6	4	5	7	0	0	0	0	4	5	7	0	0	0	0	
82	Portapique	15/08		31/10	*	13	11	13	26	0	0	0	0	11	13	26	4	5	1	1	
132	Porters Lake (East B	1/06		29/08		1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0
84	Pugwash	1/09		31/10	*	0															
85	Quoddy	1/06		29/08		3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
121	Ramshead (Ramsey)	15/08		31/10		0															
129	River Bennett	15/06		15/10		0															
122	River Deny's	15/06		15/10		0															
86	River Hebert	15/08		31/10	*	29	66	80	135	0	0	0	0	66	80	135	7	8	6	7	
87	River John	1/09		31/10		59	14	17	28	0	0	0	0	14	17	28	1	1	82	99	
88	River Phillip	1/09		31/10		144	78	94	155	0	0	0	0	78	94	155	16	19	336	407	
89	River Tillard	15/06		15/10		22	7	8	17	0	0	0	0	7	8	17	0	0	7	8	
90	Rocky Run Porters L.	1/06		29/08		1	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0
91	Roseway	10/05		15/08		0															
92	Round Hill	15/08		31/10		0															
131	Sackville	10/05		15/08		18	31	38	63	0	0	0	0	31	38	63	15	18	8	10	
95	Saint Croix	15/08		31/10		33	23	28	46	0	0	0	0	23	28	46	16	19	0	0	
93	Saint Esprit	15/06		15/10		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	Saint Francis	24/06		22/09		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	Saint Mary's	18/05		15/09	*	782	475	575	1010	0	0	0	0	475	575	1010	66	80	382	462	
97	Salmon: Cape Breton	15/06		15/10		46	6	7	13	0	0	0	0	6	7	13	0	0	17	21	
98	Salmon: Colchester	15/08		31/10	*	69	80	97	158	0	0	0	0	80	97	158	42	51	18	22	
99	Salmon: Digby Co.	1/06		15/08		60	67	81	149	0	0	0	0	67	81	149	3	4	7	8	
100	Salmon: Guysborough	24/06		22/09	*	177	232	281	484	0	0	0	0	232	281	484	10	12	174	211	
101	Salmon: Halifax Co.	1/06		29/08		19	11	13	23	0	0	0	0	11	13	23	3	4	4	5	
102	Shinimikas	1/09		31/10		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	Ship Hbr.L.Charlotte	1/06		29/08		36	39	47	85	0	0	0	0	39	47	85	2	2	3	4	
104	Shubenacadie	15/08		31/10		75	51	62	106	0	0	0	0	51	62	106	8	10	15	18	
105	Siesiboo	10/05		15/08		0															
123	Skye	15/06		15/10		0															
106	South	1/09		31/10		8	5	6	11	0	0	0	0	5	6	11	5	6	1	1	
107	Stewiacke	1/08		31/10	*	768	899	1088	1845	0	0	0	0	899	1088	1845	200	242	175	212	
126	Sutherland	1/09		31/10		0															
125	Sydney	15/06		15/10		3	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
108	Tangier	1/06		29/08		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	Taylor Bay Brook	1/06		29/08		0															
110	Three Fathom Harbour	1/06		29/08		0															
111	Tidnish	1/09		31/10		0															
130	Tracadie	1/09		31/10		0															
112	Tusket	1/06		15/08	*	103	95	115	215	0	0	0	0	95	115	215	16	19	30	36	
113	Wallace	1/09		31/10		67	8	10	16	0	0	0	0	8	10	16	2	2	27	33	
114	Waugh	1/09		31/10		24	4	5	9	0	0	0	0	4	5	9	0	0	4	5	
117	West Sheet Harbour	1/06		29/08	*	107	220	266	446	0	0	0	0	220	266	446	38	46	22	27	
115	West: Antigonish Co.	1/09		31/10		99	54	65	120	0	0	0	0	54	65	120	20	24	180	218	
116	West: Pictou Co.	1/09		31/10		60	11	13	21	0	0	0	0	11	13	21	1	1	50	60	
128	Wright	1/09		31/10		0															
Provincial totals:						8706	7559	9145	15890	0	0	0	0	7559	9145	15890	1291	1562	5753	6960	

* See variation order.

TABLE 20. 1989: Catch by district.

District	Observed No. of anglers	Numbers retained										Numbers released			
		Grilse			Salmon			Unknown	Totals			Grilse		Salmon	
		Obs.	Estimated		Obs.	Estimated		Obs.	Obs.	Estimated		Obs.	Est.	Obs.	Est.
		No.	No.	kg	No.	No.	kg	No.	No.	No.	kg	Obs.	Est.	Obs.	Est.
1	29	10	12	19	0	0	0	0	10	12	19	2	2	47	57
2	1519	364	440	765	0	0	0	0	364	440	765	106	128	1414	1711
3	0														
4	423	146	177	274	0	0	0	0	146	177	274	51	62	773	935
6	6	1	1	0	0	0	0	0	1	1	0	0	0	3	4
7	148	56	68	115	0	0	0	0	56	68	115	3	4	50	60
8	325	326	394	667	0	0	0	0	326	394	667	23	28	103	125
9	67	27	33	63	0	0	0	0	27	33	63	1	1	69	83
10	25	4	5	9	0	0	0	0	4	5	9	0	0	4	5
11	119	25	30	49	0	0	0	0	25	30	49	2	2	132	160
12	241	35	42	70	0	0	0	0	35	42	70	42	51	555	671
13	108	60	73	134	0	0	0	0	60	73	134	25	30	182	220
14	180	235	284	488	0	0	0	0	235	284	488	10	12	174	211
15	0														
16	38	45	54	89	0	0	0	0	45	54	89	0	0	1	1
17	982	607	734	1272	0	0	0	0	607	734	1272	95	115	411	497
18	1	0	0	0	0	0	0	0	0	0	0	0	0	10	12
19	297	440	532	890	0	0	0	0	440	532	890	59	71	48	58
20	412	253	306	546	0	0	0	0	253	306	546	59	71	144	174
21	18	31	38	63	0	0	0	0	31	38	63	15	18	8	10
22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	13	5	6	10	0	0	0	0	5	6	10	4	5	0	0
24	151	180	218	361	0	0	0	0	180	218	361	15	18	36	44
25	307	424	513	857	0	0	0	0	424	513	857	49	59	112	136
27	1164	2162	2616	4658	0	0	0	0	2162	2616	4658	361	437	570	690
28	526	574	694	1290	0	0	0	0	574	694	1290	31	38	228	276
30	0														
31	46	10	12	22	0	0	0	0	10	12	22	2	2	9	11
33	103	95	115	215	0	0	0	0	95	115	215	16	19	30	36
35	0														
36	60	67	81	149	0	0	0	0	67	81	149	3	4	7	8
38	0														
39	7	3	4	8	0	0	0	0	3	4	8	0	0	1	1
41	51	39	47	76	0	0	0	0	39	47	76	3	4	39	47
42	877	973	1177	1996	0	0	0	0	973	1177	1996	224	271	190	230
43	249	276	334	549	0	0	0	0	276	334	549	72	87	40	48
44	0														
45	145	78	94	155	0	0	0	0	78	94	155	16	19	336	407
46	67	8	10	16	0	0	0	0	8	10	16	2	2	27	33
Provincial totals:	8706	7559	9145	15890	0	0	0	0	7559	9145	15890	1291	1562	5753	6960

TABLE 21. 1989: Catch by county.

County		Observed No. of anglers	Numbers retained									Numbers released				
			Grilse			Salmon			Unknown	Totals			Grilse		Salmon	
			Obs.	Estimated		Obs.	Estimated		Obs.	Obs.	Estimated		Obs.	Est.	Obs.	Est.
Code	Name	No.	No.	kg	No.	No.	kg	No.	No.	No.	kg	Obs.	Est.	Obs.	Est.	
1	Annapolis	7	3	4	8	0	0	0	0	3	4	8	0	0	1	1
2	Antigonish	108	60	73	134	0	0	0	0	60	73	134	25	30	182	220
3	Cape Breton	154	57	69	117	0	0	0	0	57	69	117	3	4	53	64
4	Colchester	1042	1179	1426	2402	0	0	0	0	1179	1426	2402	272	329	219	265
5	Cumberland	363	266	322	532	0	0	0	0	266	322	532	33	40	399	483
6	Digby	60	67	81	149	0	0	0	0	67	81	149	3	4	7	8
7	Guy'sborough	1200	887	1073	1851	0	0	0	0	887	1073	1851	105	127	586	709
8	Halifax	743	729	882	1509	0	0	0	0	729	882	1509	137	166	210	254
9	Hants	109	74	90	152	0	0	0	0	74	90	152	24	29	15	18
10	Inverness	1519	364	440	765	0	0	0	0	364	440	765	106	128	1414	1711
11	Kings	51	39	47	76	0	0	0	0	39	47	76	3	4	39	47
12	Lunenburg	1471	2586	3129	5517	0	0	0	0	2586	3129	5517	410	496	682	825
13	Pictou	360	60	73	121	0	0	0	0	60	73	121	44	53	687	831
14	Queens	526	574	694	1290	0	0	0	0	574	694	1290	31	38	228	276
15	Richmond	392	353	427	730	0	0	0	0	353	427	730	24	29	172	208
16	Shelburne	46	10	12	22	0	0	0	0	10	12	22	2	2	9	11
17	Victoria	452	156	189	293	0	0	0	0	156	189	293	53	64	820	992
18	Yarmouth	103	95	115	215	0	0	0	0	95	115	215	16	19	30	36
Provincial totals:		8706	7559	9145	15890	0	0	0	0	7559	9145	15890	1291	1562	5753	6960

TABLE 22. 1989: Catch by salmon fishing area.

Fishing Area		Observed No. of anglers	Numbers retained									Numbers released				
			Grilse			Salmon			Unknown	Totals			Grilse		Salmon	
			Obs.	Estimated		Obs.	Estimated		Obs.	Obs.	Estimated		Obs.	Est.	Obs.	Est.
Code	Name	No.	No.	kg	No.	No.	kg	No.	No.	No.	kg	Obs.	Est.	Obs.	Est.	
19	Cape Breton East	998	566	685	1139	0	0	0	0	566	685	1139	80	97	1045	1264
18	Gulf Shore Nova Scotia	2224	574	694	1199	0	0	0	0	574	694	1199	193	234	2650	3206
20	Eastern Shore	1910	1580	1912	3288	0	0	0	0	1580	1912	3288	223	270	788	953
22	Upper Bay of Fundy	1335	1471	1780	2991	0	0	0	0	1471	1780	2991	314	380	306	370
21	South West Nova Scotia	2239	3368	4075	7267	0	0	0	0	3368	4075	7267	481	582	964	1166
Provincial totals:		8706	7559	9145	15890	0	0	0	0	7559	9145	15890	1291	1562	5753	6960

Code	River Name	Season dates				Observed No. of anglers	Numbers caught (including releases)								Effort		Catch per effort Fish/day	Percent large salmon
		Begin		End			Grilse		Salmon		Unknown		Total		No. of rod days			
		D	M	D	M		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.				
76	North : Colchester	15/08	31/10	*	72	117	142	8	10	0	125	151	398	497	0.314	6.4		
77	North : Victoria Co	1/06	15/10	*	162	134	162	331	400	0	465	563	1074	1342	0.433	71.2		
78	North Aspy	15/06	15/10		24	6	7	27	33	0	33	40	86	107	0.384	81.8		
120	Northwest Brook (Riv	15/06	15/10		1	0	0	0	0	0	0	0	6	7	0.000	0.0		
79	Paradise Brook	15/08	31/10		0													
80	Petite Riviere	15/06	15/08	*	67	164	198	17	21	0	181	219	879	1098	0.206	9.4		
81	Pomquet	1/09	31/10		1	1	1	1	1	0	2	2	4	5	0.500	50.0		
83	Port Dufferin	1/06	29/08		6	4	5	0	0	0	4	5	69	86	0.058	0.0		
82	Portapique	15/08	31/10	*	13	15	18	1	1	0	16	19	37	46	0.432	6.3		
132	Porters Lake (East B	1/06	29/08		1	1	1	0	0	0	1	1	3	4	0.333	0.0		
84	Pugwash	1/09	31/10	*	0													
85	Quoddy	1/06	29/08		3	0	0	1	1	0	1	1	9	11	0.111	100.0		
121	Ramshead (Ramsey)	15/08	31/10		0													
129	River Bennett	15/06	15/10		0													
122	River Deny's	15/06	15/10		0													
86	River Hébert	15/08	31/10	*	29	73	88	6	7	0	79	96	320	400	0.247	7.6		
87	River John	1/09	31/10		59	15	18	82	99	0	97	117	214	267	0.453	84.5		
88	River Philip	1/09	31/10		144	94	114	336	407	0	430	520	999	1248	0.430	78.1		
89	River Tillard	15/06	15/10		22	7	8	7	8	0	14	17	73	91	0.192	50.0		
90	Rocky Run Porters L.	1/06	29/08		1	1	1	0	0	0	1	1	25	31	0.040	0.0		
91	Roseway	10/05	15/08		0													
92	Round Hill	15/08	31/10		0													
131	Sackville	10/05	15/08		18	46	56	8	10	0	54	65	130	162	0.415	14.8		
95	Saint Croix	15/08	31/10		33	39	47	0	0	0	39	47	217	271	0.180	0.0		
93	Saint Esprit	15/06	15/10		5	0	0	0	0	0	0	0	8	10	0.000	0.0		
94	Saint Francis	24/06	22/09		1	0	0	0	0	0	0	0	4	5	0.000	0.0		
96	Saint Mary's	18/05	15/09	*	782	541	655	382	462	0	923	1117	5122	6398	0.180	41.4		
97	Salmon: Cape Breton	15/06	15/10		46	6	7	17	21	0	23	28	227	284	0.101	73.9		
98	Salmon: Colchester	15/08	31/10	*	69	122	148	18	22	0	140	169	351	438	0.399	12.9		
99	Salmon: Digby Co.	1/06	15/08		60	70	85	7	8	0	77	93	550	687	0.140	9.1		
100	Salmon: Guysborough	24/06	22/09	*	177	242	293	174	211	0	416	503	1410	1761	0.295	41.8		
101	Salmon: Halifax Co.	1/06	29/08		19	14	17	4	5	0	18	22	106	132	0.170	22.2		
102	Shinimikas	1/09	31/10		1	0	0	0	0	0	0	0	3	4	0.000	0.0		
103	Ship Hbr.L.Charlotte	1/06	29/08		36	41	50	3	4	0	44	53	368	460	0.120	6.8		
104	Shubenacadie	15/08	31/10		75	59	71	15	18	0	74	90	404	505	0.183	20.3		
105	Sissiboo	10/05	15/08		0													
123	Skye	15/06	15/10		0													
106	South	1/09	31/10		8	10	12	1	1	0	11	13	26	32	0.423	9.1		
107	Stewiacke	1/08	31/10	*	768	1099	1330	175	212	0	1274	1541	4803	6000	0.265	13.7		
126	Sutherland	1/09	31/10		0													
125	Sydney	15/06	15/10		3	0	0	2	2	0	2	2	7	9	0.286	100.0		
108	Tangier	1/06	29/08		5	0	0	0	0	0	0	0	11	14	0.000	0.0		
109	Taylor Bay Brook	1/06	29/08		0													
110	Three Fathom Harbour	1/06	29/08		0													
111	Tidnish	1/09	31/10		0													
130	Tracadie	1/09	31/10		0													
112	Tusket	1/06	15/08	*	103	111	134	30	36	0	141	171	1128	1409	0.125	21.3		
113	Wallace	1/09	31/10		67	10	12	27	33	0	37	45	191	239	0.194	73.0		
114	Wauha	1/09	31/10		24	4	5	4	5	0	8	10	74	92	0.108	50.0		
117	West Sheet Harbour	1/06	29/08	*	107	258	312	22	27	0	280	339	1657	2070	0.169	7.9		
115	West: Antigonish Co.	1/09	31/10		99	74	90	180	218	0	254	307	420	525	0.605	70.9		
116	West: Pictou Co.	1/09	31/10		60	12	15	50	60	0	62	75	340	425	0.182	80.6		
128	Wright	1/09	31/10		0													
Provincial totals:					8706	8850	10707	5753	6960	0	14603	17668	66146	82627	0.221	39.4		

* See variation order.

TABLE 24. 1989: Catch and effort by district.

District	Observed	Numbers caught (including releases)							Effort		Catch per	Percent
	No. of	Grilse		Salmon		Unknown	Total		No. of rod days		effort	large
	Anglers	Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	Obs.	Est.	fish/day	Salmon
1	29	12	15	47	57	0	59	71	232	290	0.254	79.7
2	1519	470	569	1414	1711	0	1884	2279	10831	13530	0.174	75.1
3	0											
4	423	197	238	773	935	0	970	1174	2221	2774	0.437	79.7
6	6	1	1	3	4	0	4	5	28	35	0.143	75.0
7	148	59	71	50	60	0	109	132	1027	1283	0.106	45.9
8	325	349	422	103	125	0	452	547	2572	3213	0.176	22.8
9	67	28	34	69	83	0	97	117	390	487	0.249	71.1
10	25	4	5	4	5	0	8	10	75	94	0.107	50.0
11	119	27	33	132	160	0	159	192	554	692	0.287	83.0
12	241	77	93	555	671	0	632	765	1374	1716	0.460	87.8
13	108	85	103	182	220	0	267	323	450	562	0.593	68.2
14	180	245	296	174	211	0	419	507	1422	1776	0.295	41.5
15	0											
16	38	45	54	1	1	0	46	56	350	437	0.131	2.2
17	982	702	849	411	497	0	1113	1347	6308	7880	0.176	36.9
18	1	0	0	10	12	0	10	12	30	37	0.333	100.0
19	297	499	604	48	58	0	547	662	3177	3969	0.172	8.8
20	412	312	377	144	174	0	456	552	3049	3809	0.150	31.6
21	18	46	56	8	10	0	54	65	130	162	0.415	14.8
22	2	0	0	0	0	0	0	0	4	5	0.000	0.0
23	13	9	11	0	0	0	9	11	43	54	0.209	0.0
24	151	195	236	36	44	0	231	279	1223	1528	0.189	15.6
25	307	473	572	112	136	0	585	708	2717	3394	0.215	19.1
27	1164	2523	3052	570	690	0	3093	3742	11561	14442	0.268	18.4
28	526	605	732	228	276	0	833	1008	5922	7398	0.141	27.4
30	0											
31	46	12	15	9	11	0	21	25	345	431	0.061	42.9
32	0											
33	103	111	134	30	36	0	141	171	1128	1409	0.125	21.3
35	0											
36	60	70	85	7	8	0	77	93	550	687	0.140	9.1
38	0											
39	7	3	4	1	1	0	4	5	61	76	0.066	25.0
41	51	42	51	39	47	0	81	98	507	633	0.160	48.1
42	877	1197	1448	190	230	0	1387	1678	5431	6784	0.255	13.7
43	249	348	421	40	48	0	388	469	1241	1550	0.313	10.3
44	0											
45	145	94	114	336	407	0	430	520	1002	1252	0.429	78.1
46	67	10	12	27	33	0	37	45	191	239	0.194	73.0
Provincial totals	8706	8850	10707	5753	6960	0	14603	17668	66146	82627	0.221	39.4

TABLE 25. 1989: Catch and effort by county.

County Code	Name	Observed	Numbers caught (including releases)							Effort		Catch per	Percent
		No. of Anglers	Grilse		Salmon		Unknown	Total		No. of rod days		effort	large
			Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	Obs.	Est.	fish/day	salmon
1	Annapolis	7	3	4	1	1	0	4	5	61	76	0.066	25.0
2	Antigonish	108	85	103	182	220	0	267	323	450	562	0.593	68.2
3	Cape Breton	154	60	73	53	64	0	113	137	1055	1318	0.107	46.9
4	Colchester	1042	1451	1756	219	265	0	1670	2020	6119	7644	0.273	13.1
5	Cumberland	363	299	362	399	483	0	698	844	2416	3018	0.289	57.2
6	Digby	60	70	85	7	8	0	77	93	550	687	0.140	9.1
7	Guysborough	1200	992	1200	586	709	0	1578	1909	8080	10093	0.195	37.1
8	Halifax	743	866	1048	210	254	0	1076	1302	6433	8036	0.167	19.5
9	Hants	109	98	119	15	18	0	113	137	628	784	0.180	13.3
10	Inverness	1519	470	569	1414	1711	0	1884	2279	10831	13530	0.174	75.1
11	Kings	51	42	51	39	47	0	81	98	507	633	0.160	48.1
12	Lunenburg	1471	2996	3625	682	825	0	3678	4450	14278	17836	0.258	18.5
13	Pictou	360	104	126	687	831	0	791	957	1928	2408	0.410	86.9
14	Queens	526	605	732	228	276	0	833	1008	5922	7398	0.141	27.4
15	Richmond	392	377	456	172	208	0	549	664	2962	3700	0.185	31.3
16	Shelburne	46	12	15	9	11	0	21	25	345	431	0.061	42.9
17	Victoria	452	209	253	820	992	0	1029	1245	2453	3064	0.419	79.7
18	Yarmouth	103	111	134	30	36	0	141	171	1128	1409	0.125	21.3
Provincial totals:		8706	8850	10707	5753	6960	0	14603	17668	66146	82627	0.221	39.4

TABLE 26. 1989: Catch and effort by salmon fishing area.

Fishing Area Code	Name	Observed	Numbers caught (including releases)							Effort		Catch per	Percent
		No. of Anglers	Grilse		Salmon		Unknown	Total		No. of rod days		effort	large
			Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	Obs.	Est.	fish/day	salmon
19	Cape Breton East	998	646	782	1045	1264	0	1691	2046	6470	8082	0.261	61.8
18	Gulf Shore Nova Scotia	2224	767	928	2650	3206	0	3417	4134	14477	18084	0.236	77.6
20	Eastern Shore	1910	1803	2181	788	953	0	2591	3135	14336	17908	0.181	30.4
22	Upper Bay of Fundy	1335	1785	2160	306	370	0	2091	2530	8463	10572	0.247	14.6
21	South West Nova Scotia	2239	3849	4657	964	1166	0	4813	5823	22400	27981	0.215	20.0
Provincial totals:		8706	8850	10707	5753	6960	0	14603	17668	66146	82627	0.221	39.4

TABLE 27. 1989: Monthly catch by river.

Month		Grilse		Salmon		Unknown		Total		Grilse		Salmon		Percent		
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	large salmon
Aconi Brook River code: 1 Season dates: 15/ 6/89 to 15/10/89.																
6	June															
7	July															
8	Aug															
9	Sept															
10	Oct	1	1	0	0	0	0	1	1	1	55.9	0	0.0	0	0.0	0.0
River total:		1	1	0	0	0	0	1	1	1	55.9	0	0.0	0	0.0	0.0
Annapolis River code: 2 Season dates: 1/ 5/89 to 31/ 7/89.																
5	May															
6	June	1	1	0	0	0	0	1	1	1	62.5	1	1.8	0	0.0	0.0
7	July	2	2	0	0	0	0	2	2	2	58.4	2	2.0	0	0.0	0.0
River total:		3	4	0	0	0	0	3	4	3	59.8	3	2.0	0	0.0	0.0
Apple River code: 3 Season dates: 15/ 8/89 to 31/10/89.																
8	Aug	1	1	0	0	0	0	1	1	0	0.0	1	1.8	0	0.0	0.0
9	Sept															
10	Oct	5	6	0	0	0	0	5	6	5	54.9	5	1.2	0	0.0	0.0
River total:		6	7	0	0	0	0	6	7	5	54.9	6	1.3	0	0.0	0.0
Baddeck River code: 4 Season dates: 15/ 6/89 to 15/10/89.																
6	June															
7	July															
8	Aug															
9	Sept	1	1	0	0	0	0	1	1	1	58.4	1	1.9	0	0.0	0.0
10	Oct	6	7	0	0	0	0	6	7	6	56.4	3	1.7	0	0.0	0.0
River total:		7	8	0	0	0	0	7	8	7	56.7	4	1.7	0	0.0	0.0
Barachois River code: 5 Season dates: 15/ 6/89 to 15/10/89.																
6	June															
7	July															
8	Aug															
9	Sept															
10	Oct	3	4	0	0	0	0	3	4	3	56.6	2	2.4	0	0.0	0.0
River total:		3	4	0	0	0	0	3	4	3	56.6	2	2.4	0	0.0	0.0

Barney's River code: 6 Season dates: 1/ 9/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent					
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon	
9	Sept																		
10	Oct	1	1	0	0	0	0	0	1	1	0	0.0	1	1.4	0	0.0	0	0.0	0.0
River total:		1	1	0	0	0	0	1	1	0	0.0	1	1.4	0	0.0	0	0.0	0.0	

* See variation order.

Catalone River code: 11 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	1	1	0	0	0	0	1	1	1	58.4	1	1.8	0	0.0	0	0.0	0.0
8	Aug	3	4	0	0	0	0	3	4	3	51.6	3	1.3	0	0.0	0	0.0	0.0
9	Sept	8	10	0	0	0	0	8	10	8	55.4	6	1.6	0	0.0	0	0.0	0.0
10	Oct	13	16	0	0	0	0	13	16	13	55.7	13	1.6	0	0.0	0	0.0	0.0
River total:		25	30	0	0	0	0	25	30	25	55.2	23	1.6	0	0.0	0	0.0	0.0

Cheticamp* River code: 12 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	5	6	0	0	0	0	5	6	2	55.9	5	1.7	0	0.0	0	0.0	0.0
10	Oct																	
River total:		5	6	0	0	0	0	5	6	2	55.9	5	1.7	0	0.0	0	0.0	0.0

* For Cheticamp catch refer to Table 28 on page 68.

Clyde River code: 16 Season dates: 10/ 5/89 to 15/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June																	
7	July	7	8	0	0	0	0	7	8	7	58.7	6	2.0	0	0.0	0	0.0	0.0
8	Aug	3	4	0	0	0	0	3	4	3	54.6	2	1.4	0	0.0	0	0.0	0.0
River total:		10	12	0	0	0	0	10	12	10	57.5	8	1.8	0	0.0	0	0.0	0.0

* See variation order.

Cornwallis River code: 18 Season dates: 15/ 8/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug																	
9	Sept																	
10	Oct	1	1	0	0	0	0	1	1	1	53.3	0	0.0	0	0.0	0	0.0	0.0
River total:		1	1	0	0	0	0	1	1	1	53.3	0	0.0	0	0.0	0	0.0	0.0

Country Harbour River code: 19 Season dates: 24/ 6/89 to 22/ 9/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	9	11	0	0	0	0	9	11	4	52.8	9	1.6	0	0.0	0	0.0	0.0
8	Aug	2	2	0	0	0	0	2	2	2	55.9	2	1.8	0	0.0	0	0.0	0.0
9	Sept	7	8	0	0	0	0	7	8	3	55.9	7	1.5	0	0.0	0	0.0	0.0
River total:		18	22	0	0	0	0	18	22	9	54.5	18	1.6	0	0.0	0	0.0	0.0

* See variation order.

Debert River code: 20 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug	1	1	0	0	0	0	1	1	1	55.9	1	1.1	0	0.0	0	0.0	0.0
9	Sept																	
10	Oct	28	34	0	0	0	0	28	34	25	57.6	16	1.5	0	0.0	0	0.0	0.0
River total:		29	35	0	0	0	0	29	35	26	57.6	17	1.5	0	0.0	0	0.0	0.0

* See variation order.

East; Pictou Co. River code: 23 Season dates: 1/ 9/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	5	6	0	0	0	0	5	6	4	56.0	5	1.6	0	0.0	0	0.0	0.0
10	Oct	29	35	0	0	0	0	29	35	25	57.3	27	1.7	0	0.0	0	0.0	0.0
River total:		34	41	0	0	0	0	34	41	29	57.1	32	1.7	0	0.0	0	0.0	0.0

* See variation order.

East; Sheet Harbour River code: 24 Season dates: 1/ 6/89 to 29/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	11	13	0	0	0	0	11	13	10	55.1	11	1.6	0	0.0	0	0.0	0.0
7	July	29	35	0	0	0	0	29	35	27	53.5	29	1.6	0	0.0	0	0.0	0.0
8	Aug	18	22	0	0	0	0	18	22	18	54.2	17	1.7	0	0.0	0	0.0	0.0
River total:		58	70	0	0	0	0	58	70	55	54.0	57	1.6	0	0.0	0	0.0	0.0

* See variation order.

Economy River code: 25 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug																	
9	Sept																	
10	Oct	6	7	0	0	0	0	6	7	5	60.5	5	1.4	0	0.0	0	0.0	0.0
River total:		6	7	0	0	0	0	6	7	5	60.5	5	1.4	0	0.0	0	0.0	0.0

* See variation order.

Ecum Secum		River code: 26		Season dates: 1/ 6/89 to 29/ 8/89.													
Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	15	18	0	0	0	15	18	14	54.9	14	1.6	0	0.0	0	0.0	0.0
7	July	33	40	0	0	0	33	40	30	54.2	30	1.7	0	0.0	0	0.0	0.0
8	Aug	15	18	0	0	0	15	18	14	52.4	15	1.7	0	0.0	0	0.0	0.0
River total:		63	76	0	0	0	63	76	58	53.9	59	1.7	0	0.0	0	0.0	0.0

Folly		River code: 27		Season dates: 15/ 8/89 to 31/10/89. *													
Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug																
9	Sept	3	4	0	0	0	3	4	2	59.7	3	1.7	0	0.0	0	0.0	0.0
10	Oct	24	29	0	0	0	24	29	23	56.8	14	1.7	0	0.0	0	0.0	0.0
River total:		27	33	0	0	0	27	33	25	57.1	17	1.7	0	0.0	0	0.0	0.0

* See variation order.

Framboise		River code: 28		Season dates: 15/ 6/89 to 15/10/89.													
Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	9	11	0	0	0	9	11	9	57.1	9	1.8	0	0.0	0	0.0	0.0
7	July	37	45	0	0	0	37	45	35	56.3	37	1.7	0	0.0	0	0.0	0.0
8	Aug	1	1	0	0	0	1	1	0	0.0	1	1.8	0	0.0	0	0.0	0.0
9	Sept	16	19	0	0	0	16	19	15	54.2	16	1.6	0	0.0	0	0.0	0.0
10	Oct																
River total:		63	76	0	0	0	63	76	59	55.9	63	1.7	0	0.0	0	0.0	0.0

Gaspereau: Brook		River code: 32		Season dates: 1/ 6/89 to 29/ 8/89.													
Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	5	6	0	0	0	5	6	1	55.9	5	1.4	0	0.0	0	0.0	0.0
7	July	2	2	0	0	0	2	2	1	53.3	2	1.4	0	0.0	0	0.0	0.0
8	Aug	4	5	0	0	0	4	5	1	48.3	4	1.7	0	0.0	0	0.0	0.0
River total:		11	13	0	0	0	11	13	3	52.5	11	1.5	0	0.0	0	0.0	0.0

Gaspereau: C. Breton		River code: 30		Season dates: 15/ 6/89 to 15/10/89.													
Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																
7	July																
8	Aug																
9	Sept																
10	Oct	2	2	0	0	0	2	2	0	0.0	2	1.7	0	0.0	0	0.0	0.0
River total:		2	2	0	0	0	2	2	0	0.0	2	1.7	0	0.0	0	0.0	0.0

Gaspereau, Kings Co. River code: 31 Season dates: 15/ 5/89 to 15/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May	1	1	0	0	0	1	1	1	61.0	1	1.6	0	0.0	0	0.0	0.0
6	June	11	13	0	0	0	11	13	11	56.5	11	1.8	0	0.0	0	0.0	0.0
7	July	25	30	0	0	0	25	30	25	54.8	25	1.6	0	0.0	0	0.0	0.0
8	Aug	1	1	0	0	0	1	1	1	50.8	1	1.4	0	0.0	0	0.0	0.0
River total:		38	46	0	0	0	38	46	38	55.4	38	1.6	0	0.0	0	0.0	0.0

Gerratt River code: 34 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																
7	July																
8	Aug																
9	Sept	1	1	0	0	0	1	1	1	58.4	1	1.6	0	0.0	0	0.0	0.0
10	Oct																
River total:		1	1	0	0	0	1	1	1	58.4	1	1.6	0	0.0	0	0.0	0.0

Gold River code: 35 Season dates: 10/ 5/89 to 15/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May	2	2	0	0	0	2	2	2	55.9	2	1.5	0	0.0	0	0.0	0.0
6	June	283	342	0	0	0	283	342	242	54.8	266	1.7	0	0.0	0	0.0	0.0
7	July	107	129	0	0	0	107	129	91	54.9	79	1.7	0	0.0	0	0.0	0.0
8	Aug	4	5	0	0	0	4	5	4	56.2	1	1.6	0	0.0	0	0.0	0.0
River total:		396	479	0	0	0	396	479	339	54.8	348	1.7	0	0.0	0	0.0	0.0

* See variation order.

Grand River code: 36 Season dates: 15/ 6/89 to 15/10/89. *

Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	60	73	0	0	0	60	73	48	55.3	54	1.6	0	0.0	0	0.0	0.0
7	July	100	121	0	0	0	100	121	87	56.0	88	1.8	0	0.0	0	0.0	0.0
8	Aug	16	19	0	0	0	16	19	13	56.0	12	1.7	0	0.0	0	0.0	0.0
9	Sept	36	44	0	0	0	36	44	32	56.2	22	1.7	0	0.0	0	0.0	0.0
10	Oct	28	34	0	0	0	28	34	26	53.5	24	1.6	0	0.0	0	0.0	0.0
River total:		240	290	0	0	0	240	290	206	55.6	200	1.7	0	0.0	0	0.0	0.0

* See variation order.

Great Village River code: 37 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent			
No.	Name	Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight		large	
		Obs.	Est.	Obs.	Est.	Obs.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug																
9	Sept																
10	Oct	17	21	0	0	0	17	21	16	56.4	14	1.7	0	0.0	0	0.0	0.0
River total:		17	21	0	0	0	17	21	16	56.4	14	1.7	0	0.0	0	0.0	0.0

* See variation order.

Guysborough River code: 38 Season dates: 24/ 6/89 to 22/ 9/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July	1	1	0	0	0	0	1	1	1	51.6	1	1.4	0	0.0	0	0.0
8	Aug	2	2	0	0	0	0	2	2	2	55.9	2	1.6	0	0.0	0	0.0
9	Sept																
River total:		3	4	0	0	0	0	3	4	3	54.4	3	1.5	0	0.0	0	0.0

Indian Brook River code: 41 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July																
8	Aug																
9	Sept																
10	Oct	1	1	0	0	0	0	1	1	1	55.9	1	1.4	0	0.0	0	0.0
River total:		1	1	0	0	0	0	1	1	1	55.9	1	1.4	0	0.0	0	0.0

Ingonish River code: 42 Season dates: 15/ 6/89 to 15/10/89. *

Month		Number of fish				Grilse				Salmon				Percent large salmon			
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July																
8	Aug	2	2	0	0	0	0	2	2	0	0.0	2	1.6	0	0.0	0	0.0
9	Sept	2	2	0	0	0	0	2	2	0	0.0	2	1.6	0	0.0	0	0.0
10	Oct	2	2	0	0	0	0	2	2	0	0.0	2	1.6	0	0.0	0	0.0
River total:		6	7	0	0	0	0	6	7	0	0.0	6	1.6	0	0.0	0	0.0

* See variation order.

Ingram River code: 43 Season dates: 1/ 6/89 to 15/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July	3	4	0	0	0	0	3	4	1	58.4	3	1.8	0	0.0	0	0.0
8	Aug	2	2	0	0	0	0	2	2	2	53.3	2	1.5	0	0.0	0	0.0
River total:		5	6	0	0	0	0	5	6	3	55.0	5	1.7	0	0.0	0	0.0

Inhabitants River code: 44 Season dates: 15/ 6/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight	
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July																
8	Aug																
9	Sept	5	6	0	0	0	0	5	6	5	58.4	4	1.9	0	0.0	0	0.0
10	Oct	15	18	0	0	0	0	15	18	12	57.6	14	1.9	0	0.0	0	0.0
River total:		20	24	0	0	0	0	20	24	17	57.9	18	1.9	0	0.0	0	0.0

Isaac's Harbour River code: 45 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	5	6	0	0	0	0	5	6	5	55.4	5	1.8	0	0.0	0	0.0	0.0
7	July	11	13	0	0	0	0	11	13	11	53.5	11	1.6	0	0.0	0	0.0	0.0
8	Aug	3	4	0	0	0	0	3	4	0	0.0	3	2.3	0	0.0	0	0.0	0.0
River total:		19	23	0	0	0	0	19	23	16	54.1	19	1.8	0	0.0	0	0.0	0.0

Kirby River code: 48 Season dates: 1/ 6/89 to 29/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	2	2	0	0	0	0	2	2	0	0.0	2	1.8	0	0.0	0	0.0	0.0
7	July	5	6	0	0	0	0	5	6	3	52.5	5	1.6	0	0.0	0	0.0	0.0
8	Aug	1	1	0	0	0	0	1	1	0	0.0	1	1.8	0	0.0	0	0.0	0.0
River total:		8	10	0	0	0	0	8	10	3	52.5	8	1.7	0	0.0	0	0.0	0.0

* See variation order.

LaHave River code: 49 Season dates: 10/ 5/89 to 15/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May	10	12	0	0	0	0	10	12	10	55.9	10	1.7	0	0.0	0	0.0	0.0
6	June	1407	1702	0	0	0	0	1407	1702	1202	56.2	1318	1.8	0	0.0	0	0.0	0.0
7	July	592	716	0	0	0	0	592	716	518	56.2	558	1.8	0	0.0	0	0.0	0.0
8	Aug	12	15	0	0	0	0	12	15	10	56.0	12	1.8	0	0.0	0	0.0	0.0
River total:		2021	2445	0	0	0	0	2021	2445	1740	56.2	1898	1.8	0	0.0	0	0.0	0.0

* See variation order.

Lawrencetown Lake River code: 51 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	2	2	0	0	0	0	2	2	2	58.4	2	1.4	0	0.0	0	0.0	0.0
8	Aug																	
River total:		2	2	0	0	0	0	2	2	2	58.4	2	1.4	0	0.0	0	0.0	0.0

Liscomb River code: 53 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	12	15	0	0	0	0	12	15	11	54.3	12	1.7	0	0.0	0	0.0	0.0
7	July	25	30	0	0	0	0	25	30	23	55.3	24	1.7	0	0.0	0	0.0	0.0
8	Aug	3	4	0	0	0	0	3	4	3	55.9	3	1.6	0	0.0	0	0.0	0.0
River total:		40	48	0	0	0	0	40	48	37	55.1	39	1.7	0	0.0	0	0.0	0.0

Lorraine Brook River code: 56 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
		Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June																
7	July	3	4	0	0	0	3	4	3	58.8	3	2.0	0	0.0	0	0.0	0.0
8	Aug																
9	Sept	4	5	0	0	0	4	5	4	56.5	3	2.2	0	0.0	0	0.0	0.0
10	Oct	3	4	0	0	0	3	4	2	51.2	3	1.4	0	0.0	0	0.0	0.0
River total:		10	12	0	0	0	10	12	9	56.1	9	1.9	0	0.0	0	0.0	0.0

Maccan River code: 58 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent large salmon			
		Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
8	Aug	20	24	0	0	0	20	24	18	53.6	20	1.8	0	0.0	0	0.0	0.0
9	Sept	27	33	0	0	0	27	33	19	54.4	24	1.5	0	0.0	0	0.0	0.0
10	Oct	61	74	0	0	0	61	74	49	56.0	45	1.7	0	0.0	0	0.0	0.0
River total:		108	131	0	0	0	108	131	86	55.2	89	1.7	0	0.0	0	0.0	0.0

* See variation order.

Margaree River code: 59 Season dates: 1/ 6/89 to 15/10/89. *

Month		Number of fish				Grilse				Salmon				Percent large salmon			
		Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June	45	54	0	0	0	45	54	32	55.9	43	1.6	0	0.0	0	0.0	0.0
7	July	123	149	0	0	0	123	149	94	55.8	106	1.7	0	0.0	0	0.0	0.0
8	Aug	63	76	0	0	0	63	76	52	56.1	60	1.8	0	0.0	0	0.0	0.0
9	Sept	80	97	0	0	0	80	97	72	57.6	74	1.7	0	0.0	0	0.0	0.0
10	Oct	48	58	0	0	0	48	58	41	57.5	38	1.9	0	0.0	0	0.0	0.0
River total:		359	434	0	0	0	359	434	291	56.5	321	1.7	0	0.0	0	0.0	0.0

* See variation order.

Marie Joseph River code: 60 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent large salmon			
		Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
6	June	9	11	0	0	0	9	11	9	55.3	9	1.7	0	0.0	0	0.0	0.0
7	July	8	10	0	0	0	8	10	8	56.4	8	1.9	0	0.0	0	0.0	0.0
8	Aug	1	1	0	0	0	1	1	1	48.3	1	1.6	0	0.0	0	0.0	0.0
9	Sept	1	1	0	0	0	1	1	1	45.0	1	1.4	0	0.0	0	0.0	0.0
10	Oct	4	5	0	0	0	4	5	4	52.7	4	1.4	0	0.0	0	0.0	0.0
River total:		23	28	0	0	0	23	28	23	54.5	23	1.7	0	0.0	0	0.0	0.0

Medway River code: 62 Season dates: 10/ 5/89 to 31/ 7/89. *

Month		Number of fish				Grilse				Salmon				Percent large salmon			
		Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean
5	May	5	6	0	0	0	5	6	5	59.3	3	2.0	0	0.0	0	0.0	0.0
6	June	343	415	0	0	0	343	415	291	57.0	323	1.9	0	0.0	0	0.0	0.0
7	July	127	154	0	0	0	127	154	102	56.9	114	1.9	0	0.0	0	0.0	0.0
River total:		475	575	0	0	0	475	575	398	57.0	440	1.9	0	0.0	0	0.0	0.0

* See variation order.

Mereey River code: 63 Season dates: 10/ 5/89 to 15/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June	27	33	0	0	0	0	27	33	26	55.6	26	1.7	0	0.0	0	0.0	0.0
7	July	54	65	0	0	0	0	54	65	53	56.7	52	1.8	0	0.0	0	0.0	0.0
8	Aug	18	22	0	0	0	0	18	22	18	56.9	18	2.0	0	0.0	0	0.0	0.0
River total:		99	120	0	0	0	0	99	120	97	56.4	96	1.8	0	0.0	0	0.0	0.0

* See variation order.

Middle: Lunenburg Co River code: 64 Season dates: 10/ 5/89 to 15/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June	1	1	0	0	0	0	1	1	0	0.0	1	1.7	0	0.0	0	0.0	0.0
7	July	2	2	0	0	0	0	2	2	0	0.0	2	1.7	0	0.0	0	0.0	0.0
8	Aug																	
River total:		3	4	0	0	0	0	3	4	0	0.0	3	1.7	0	0.0	0	0.0	0.0

Middle: Victoria Co. River code: 66 Season dates: 1/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	2	2	0	0	0	0	2	2	2	52.1	2	1.5	0	0.0	0	0.0	0.0
7	July																	
8	Aug	3	4	0	0	0	0	3	4	3	53.3	3	2.0	0	0.0	0	0.0	0.0
9	Sept	6	7	0	0	0	0	6	7	6	55.7	6	1.5	0	0.0	0	0.0	0.0
10	Oct	23	28	0	0	0	0	23	28	21	55.8	22	1.5	0	0.0	0	0.0	0.0
River total:		34	41	0	0	0	0	34	41	32	55.3	33	1.5	0	0.0	0	0.0	0.0

Mira River code: 67 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	2	2	0	0	0	0	2	2	1	63.0	2	1.8	0	0.0	0	0.0	0.0
8	Aug	4	5	0	0	0	0	4	5	1	48.3	4	1.6	0	0.0	0	0.0	0.0
9	Sept	3	4	0	0	0	0	3	4	1	53.3	3	1.6	0	0.0	0	0.0	0.0
10	Oct	3	4	0	0	0	0	3	4	3	55.0	3	2.0	0	0.0	0	0.0	0.0
River total:		12	15	0	0	0	0	12	15	6	54.9	12	1.7	0	0.0	0	0.0	0.0

Moser River code: 68 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	19	23	0	0	0	0	19	23	18	54.6	19	1.6	0	0.0	0	0.0	0.0
7	July	104	126	0	0	0	0	104	126	96	55.1	99	1.7	0	0.0	0	0.0	0.0
8	Aug	27	33	0	0	0	0	27	33	27	55.5	24	1.8	0	0.0	0	0.0	0.0
River total:		150	181	0	0	0	0	150	181	141	55.1	142	1.7	0	0.0	0	0.0	0.0

Mushamush River code: 69 Season dates: 10/ 5/89 to 15/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June	11	13	0	0	0	11	13	11	56.2	11	1.8	0	0.0	0	0.0	0	0.0
7	July	12	15	0	0	0	12	15	12	57.0	12	1.7	0	0.0	0	0.0	0	0.0
8	Aug	2	2	0	0	0	2	2	2	52.1	2	1.6	0	0.0	0	0.0	0	0.0
River total:		25	30	0	0	0	25	30	25	56.3	25	1.7	0	0.0	0	0.0	0	0.0

Musquodoboit River code: 70 Season dates: 1/ 6/89 to 29/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	97	117	0	0	0	97	117	84	56.5	91	1.8	0	0.0	0	0.0	0	0.0
7	July	97	117	0	0	0	97	117	77	56.5	94	1.8	0	0.0	0	0.0	0	0.0
8	Aug	5	6	0	0	0	5	6	5	53.3	5	1.7	0	0.0	0	0.0	0	0.0
River total:		199	241	0	0	0	199	241	166	56.4	190	1.8	0	0.0	0	0.0	0	0.0

* See variation order.

New Harbour River code: 73 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	4	5	0	0	0	4	5	4	55.2	4	1.7	0	0.0	0	0.0	0	0.0
7	July	19	23	0	0	0	19	23	18	53.0	19	1.5	0	0.0	0	0.0	0	0.0
8	Aug	3	4	0	0	0	3	4	3	56.3	3	1.9	0	0.0	0	0.0	0	0.0
River total:		26	31	0	0	0	26	31	25	53.8	26	1.6	0	0.0	0	0.0	0	0.0

North : Colchester River code: 76 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug																	
9	Sept																	
10	Oct	106	128	0	0	0	106	128	99	56.1	100	1.6	0	0.0	0	0.0	0	0.0
River total:		106	128	0	0	0	106	128	99	56.1	100	1.6	0	0.0	0	0.0	0	0.0

* See variation order.

North : Victoria Co River code: 77 Season dates: 1/ 6/89 to 15/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	9	11	0	0	0	9	11	5	56.9	8	1.5	0	0.0	0	0.0	0	0.0
7	July	52	63	0	0	0	52	63	40	54.7	52	1.4	0	0.0	0	0.0	0	0.0
8	Aug	4	5	0	0	0	4	5	2	54.6	3	1.5	0	0.0	0	0.0	0	0.0
9	Sept	23	28	0	0	0	23	28	22	55.0	18	1.6	0	0.0	0	0.0	0	0.0
10	Oct	13	16	0	0	0	13	16	12	57.4	11	1.9	0	0.0	0	0.0	0	0.0
River total:		101	122	0	0	0	101	122	81	55.3	92	1.5	0	0.0	0	0.0	0	0.0

* See variation order.

North Aspy River code: 78 Season dates: 15/ 6/89 to 15/10/89.

Month	No.	Name	Number of fish				Grilse				Salmon				Percent large salmon				
			Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight	
			Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean		No.	Mean	No.	Mean
6		June																	
7		July																	
8		Aug																	
9		Sept																	
10		Oct	4	5	0	0	0	4	5	4	54.0	2	1.7	0	0.0	0	0.0		
River total:			4	5	0	0	0	4	5	4	54.0	2	1.7	0	0.0	0	0.0		

Petite Riviere River code: 80 Season dates: 15/ 6/89 to 15/ 8/89. *

Month	No.	Name	Number of fish				Grilse				Salmon				Percent large salmon				
			Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight	
			Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean		No.	Mean	No.	Mean
6		June	77	93	0	0	0	77	93	76	55.1	72	1.8	0	0.0	0	0.0		
7		July	64	77	0	0	0	64	77	63	54.1	59	1.7	0	0.0	0	0.0		
8		Aug																	
River total:			141	171	0	0	0	141	171	139	54.6	131	1.8	0	0.0	0	0.0		

* See variation order.

Pomquet River code: 81 Season dates: 1/ 9/89 to 31/10/89.

Month	No.	Name	Number of fish				Grilse				Salmon				Percent large salmon				
			Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight	
			Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean		No.	Mean	No.	Mean
9		Sept																	
10		Oct	1	1	0	0	0	1	1	1	53.3	1	1.8	0	0.0	0	0.0		
River total:			1	1	0	0	0	1	1	1	53.3	1	1.8	0	0.0	0	0.0		

Port Dufferin River code: 83 Season dates: 1/ 6/89 to 29/ 8/89.

Month	No.	Name	Number of fish				Grilse				Salmon				Percent large salmon				
			Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight	
			Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean		No.	Mean	No.	Mean
6		June																	
7		July	3	4	0	0	0	3	4	3	52.5	3	1.4	0	0.0	0	0.0		
8		Aug	1	1	0	0	0	1	1	1	50.8	1	1.4	0	0.0	0	0.0		
River total:			4	5	0	0	0	4	5	4	52.1	4	1.4	0	0.0	0	0.0		

Portapique River code: 82 Season dates: 15/ 8/89 to 31/10/89. *

Month	No.	Name	Number of fish				Grilse				Salmon				Percent large salmon				
			Grilse		Salmon		Unknown		Total		Length		Weight			Length		Weight	
			Obs.	Est.	Obs.	Est.	Obs.	Obs. Est.	No.	Mean	No.	Mean	No.	Mean		No.	Mean	No.	Mean
8		Aug																	
9		Sept																	
10		Oct	11	13	0	0	0	11	13	11	55.9	8	2.0	0	0.0	0	0.0		
River total:			11	13	0	0	0	11	13	11	55.9	8	2.0	0	0.0	0	0.0		

* See variation order.

Porters Lake (East B) River code: 132 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	1	1	0	0	0	0	1	1	1	58.4	0	0.0	0	0.0	0	0.0	0.0
8	Aug																	
River total:		1	1	0	0	0	0	1	1	1	58.4	0	0.0	0	0.0	0	0.0	0.0

River Hebert River code: 86 Season dates: 15/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug	12	15	0	0	0	0	12	15	12	53.7	12	1.6	0	0.0	0	0.0	0.0
9	Sept	27	33	0	0	0	0	27	33	27	54.6	27	1.7	0	0.0	0	0.0	0.0
10	Oct	27	33	0	0	0	0	27	33	27	56.6	25	1.7	0	0.0	0	0.0	0.0
River total:		66	80	0	0	0	0	66	80	66	55.3	64	1.7	0	0.0	0	0.0	0.0

* See variation order.

River John River code: 87 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept																	
10	Oct	14	17	0	0	0	0	14	17	13	55.2	12	1.7	0	0.0	0	0.0	0.0
River total:		14	17	0	0	0	0	14	17	13	55.2	12	1.7	0	0.0	0	0.0	0.0

River Philip River code: 88 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	5	6	0	0	0	0	5	6	4	58.1	2	1.2	0	0.0	0	0.0	0.0
10	Oct	73	88	0	0	0	0	73	88	61	56.6	65	1.7	0	0.0	0	0.0	0.0
River total:		78	94	0	0	0	0	78	94	65	56.7	67	1.7	0	0.0	0	0.0	0.0

River Tillard River code: 89 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	2	2	0	0	0	0	2	2	2	54.0	2	2.0	0	0.0	0	0.0	0.0
8	Aug																	
9	Sept	2	2	0	0	0	0	2	2	2	57.7	1	2.3	0	0.0	0	0.0	0.0
10	Oct	3	4	0	0	0	0	3	4	3	56.3	0	0.0	0	0.0	0	0.0	0.0
River total:		7	8	0	0	0	0	7	8	7	56.0	3	2.1	0	0.0	0	0.0	0.0

Rocky Run Porters L. River code: 90 Season dates: 1/ 6/89 to 29/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July	1	1	0	0	0	0	1	1	0	0.0	1	1.4	0	0.0	0	0.0	0.0
8	Aug																	
River total:		1	1	0	0	0	0	1	1	0	0.0	1	1.4	0	0.0	0	0.0	0.0

Sackville River code: 131 Season dates: 10/ 5/89 to 15/ 8/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June	13	16	0	0	0	0	13	16	13	55.7	11	1.6	0	0.0	0	0.0	0.0
7	July	13	16	0	0	0	0	13	16	13	56.9	13	1.8	0	0.0	0	0.0	0.0
8	Aug	5	6	0	0	0	0	5	6	2	53.3	5	1.5	0	0.0	0	0.0	0.0
River total:		31	38	0	0	0	0	31	38	28	56.1	29	1.7	0	0.0	0	0.0	0.0

Saint Croix River code: 95 Season dates: 15/ 8/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug	2	2	0	0	0	0	2	2	2	54.0	2	1.3	0	0.0	0	0.0	0.0
9	Sept	6	7	0	0	0	0	6	7	6	55.5	6	1.5	0	0.0	0	0.0	0.0
10	Oct	15	18	0	0	0	0	15	18	14	58.3	13	1.8	0	0.0	0	0.0	0.0
River total:		23	28	0	0	0	0	23	28	22	57.1	21	1.6	0	0.0	0	0.0	0.0

Saint Mary's River code: 96 Season dates: 18/ 5/89 to 15/ 9/89. *

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
5	May																	
6	June	96	116	0	0	0	0	96	116	74	56.9	87	1.8	0	0.0	0	0.0	0.0
7	July	330	399	0	0	0	0	330	399	240	56.1	299	1.8	0	0.0	0	0.0	0.0
8	Aug	41	50	0	0	0	0	41	50	37	55.6	39	1.6	0	0.0	0	0.0	0.0
9	Sept	8	10	0	0	0	0	8	10	8	56.5	7	1.7	0	0.0	0	0.0	0.0
River total:		475	575	0	0	0	0	475	575	359	56.2	432	1.8	0	0.0	0	0.0	0.0

* See variation order.

Salmon: Cape Breton River code: 97 Season dates: 15/ 6/89 to 15/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
		Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
No.	Name	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June																	
7	July																	
8	Aug	1	1	0	0	0	0	1	1	1	55.9	0	0.0	0	0.0	0	0.0	0.0
9	Sept	5	6	0	0	0	0	5	6	5	58.2	4	1.9	0	0.0	0	0.0	0.0
10	Oct																	
River total:		6	7	0	0	0	0	6	7	6	57.8	4	1.9	0	0.0	0	0.0	0.0

Salmon: Colchester River code: 98 Season dates: 15/ 8/89 to 31/10/89. *

Month	No.	Name	Number of fish						Grilse				Salmon				Percent large salmon	
			Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight			
			Obs.	Est.	Obs.	Est.			Obs.	Est.	No.	Mean	No.	Mean	No.	Mean		No.
8 Aug																		
9 Sept			2	2	0	0	0	2	2	0	0.0	2	2.0	0	0.0	0	0.0	0.0
10 Oct			78	94	0	0	0	78	94	56	56.4	74	1.6	0	0.0	0	0.0	0.0
River total:			80	97	0	0	0	80	97	56	56.4	76	1.6	0	0.0	0	0.0	0.0

* See variation order.

Salmon: Digby Co. River code: 99 Season dates: 1/ 6/89 to 15/ 8/89.

Month	No.	Name	Number of fish						Grilse				Salmon				Percent large salmon	
			Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight			
			Obs.	Est.	Obs.	Est.			Obs.	Est.	No.	Mean	No.	Mean	No.	Mean		No.
6 June			43	52	0	0	0	43	52	38	59.3	39	1.9	0	0.0	0	0.0	0.0
7 July			24	29	0	0	0	24	29	17	57.2	23	1.8	0	0.0	0	0.0	0.0
8 Aug																		
River total:			67	81	0	0	0	67	81	55	58.7	62	1.8	0	0.0	0	0.0	0.0

Salmon: Guysborough River code: 100 Season dates: 24/ 6/89 to 22/ 9/89. *

Month	No.	Name	Number of fish						Grilse				Salmon				Percent large salmon	
			Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight			
			Obs.	Est.	Obs.	Est.			Obs.	Est.	No.	Mean	No.	Mean	No.	Mean		No.
6 June			17	21	0	0	0	17	21	15	53.4	16	2.0	0	0.0	0	0.0	0.0
7 July			144	174	0	0	0	144	174	114	55.7	116	1.7	0	0.0	0	0.0	0.0
8 Aug			50	60	0	0	0	50	60	41	55.2	49	1.7	0	0.0	0	0.0	0.0
9 Sept			21	25	0	0	0	21	25	17	54.1	21	1.7	0	0.0	0	0.0	0.0
River total:			232	281	0	0	0	232	281	187	55.2	202	1.7	0	0.0	0	0.0	0.0

* See variation order.

Salmon: Halifax Co. River code: 101 Season dates: 1/ 6/89 to 29/ 8/89.

Month	No.	Name	Number of fish						Grilse				Salmon				Percent large salmon	
			Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight			
			Obs.	Est.	Obs.	Est.			Obs.	Est.	No.	Mean	No.	Mean	No.	Mean		No.
6 June																		
7 July			11	13	0	0	0	11	13	11	54.7	8	1.8	0	0.0	0	0.0	0.0
8 Aug																		
River total:			11	13	0	0	0	11	13	11	54.7	8	1.8	0	0.0	0	0.0	0.0

Ship Hbr.L.Charlotte River code: 103 Season dates: 1/ 6/89 to 29/ 8/89.

Month	No.	Name	Number of fish						Grilse				Salmon				Percent large salmon	
			Grilse		Salmon		Unknown	Total	Length		Weight		Length		Weight			
			Obs.	Est.	Obs.	Est.			Obs.	Est.	No.	Mean	No.	Mean	No.	Mean		No.
6 June			20	24	0	0	0	20	24	20	56.6	20	1.7	0	0.0	0	0.0	0.0
7 July			18	22	0	0	0	18	22	18	56.7	18	1.9	0	0.0	0	0.0	0.0
8 Aug			1	1	0	0	0	1	1	1	50.8	1	1.4	0	0.0	0	0.0	0.0
River total:			39	47	0	0	0	39	47	39	56.5	39	1.8	0	0.0	0	0.0	0.0

Shubenacadie River code: 104 Season dates: 15/ 8/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug	2	2	0	0	0	0	2	2	2	45.1	2	1.6	0	0.0	0	0.0	0.0
9	Sept	11	13	0	0	0	0	11	13	9	54.4	9	1.6	0	0.0	0	0.0	0.0
10	Oct	38	46	0	0	0	0	38	46	34	56.1	35	1.7	0	0.0	0	0.0	0.0
River total:		51	62	0	0	0	0	51	62	45	55.3	46	1.7	0	0.0	0	0.0	0.0

South River code: 106 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept																	
10	Oct	5	6	0	0	0	0	5	6	5	57.7	5	1.8	0	0.0	0	0.0	0.0
River total:		5	6	0	0	0	0	5	6	5	57.7	5	1.8	0	0.0	0	0.0	0.0

Stewiacke River code: 107 Season dates: 1/ 8/89 to 31/10/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
8	Aug	116	140	0	0	0	0	116	140	102	56.2	110	1.7	0	0.0	0	0.0	0.0
9	Sept	354	428	0	0	0	0	354	428	315	56.3	315	1.7	0	0.0	0	0.0	0.0
10	Oct	429	519	0	0	0	0	429	519	399	56.5	369	1.7	0	0.0	0	0.0	0.0
River total:		899	1088	0	0	0	0	899	1088	816	56.4	794	1.7	0	0.0	0	0.0	0.0

* See variation order.

Tusket River code: 112 Season dates: 1/ 6/89 to 15/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	58	70	0	0	0	0	58	70	54	58.0	49	1.9	0	0.0	0	0.0	0.0
7	July	33	40	0	0	0	0	33	40	30	58.3	29	1.8	0	0.0	0	0.0	0.0
8	Aug	4	5	0	0	0	0	4	5	4	56.7	4	1.8	0	0.0	0	0.0	0.0
River total:		95	115	0	0	0	0	95	115	88	58.1	82	1.9	0	0.0	0	0.0	0.0

* See variation order.

Wallace River code: 113 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	4	5	0	0	0	0	4	5	4	55.8	4	1.5	0	0.0	0	0.0	0.0
10	Oct	4	5	0	0	0	0	4	5	4	56.8	4	1.6	0	0.0	0	0.0	0.0
River total:		8	10	0	0	0	0	8	10	8	56.3	8	1.6	0	0.0	0	0.0	0.0

Waugh River code: 114 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept																	
10	Oct	4	5	0	0	0	0	4	5	4	57.7	4	1.8	0	0.0	0	0.0	0.0
River total:		4	5	0	0	0	0	4	5	4	57.7	4	1.8	0	0.0	0	0.0	0.0

West Sheet Harbour River code: 117 Season dates: 1/ 6/89 to 29/ 8/89. *

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
6	June	50	60	0	0	0	0	50	60	44	55.3	50	1.8	0	0.0	0	0.0	0.0
7	July	140	169	0	0	0	0	140	169	112	54.5	133	1.7	0	0.0	0	0.0	0.0
8	Aug	30	36	0	0	0	0	30	36	24	53.7	30	1.6	0	0.0	0	0.0	0.0
River total:		220	266	0	0	0	0	220	266	180	54.6	213	1.7	0	0.0	0	0.0	0.0

* See variation order.

West: Antigonish Co. River code: 115 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	7	8	0	0	0	0	7	8	4	58.4	7	2.0	0	0.0	0	0.0	0.0
10	Oct	47	57	0	0	0	0	47	57	36	56.3	42	1.8	0	0.0	0	0.0	0.0
River total:		54	65	0	0	0	0	54	65	40	56.5	49	1.8	0	0.0	0	0.0	0.0

West: Pictou Co. River code: 116 Season dates: 1/ 9/89 to 31/10/89.

Month		Number of fish				Grilse				Salmon				Percent				
No.	Name	Grilse		Salmon		Unknown		Total		Length		Weight		Length		Weight		large
		Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	No.	Mean	No.	Mean	No.	Mean	No.	Mean	salmon
9	Sept	1	1	0	0	0	0	1	1	1	55.9	1	2.3	0	0.0	0	0.0	0.0
10	Oct	10	12	0	0	0	0	10	12	9	56.1	9	1.6	0	0.0	0	0.0	0.0
River total:		11	13	0	0	0	0	11	13	10	56.1	10	1.6	0	0.0	0	0.0	0.0

Table 28. Estimated number of salmon and grilse angled on the Cheticamp River, 1989.

Month	Salmon released	Grilse retained	Rod-days
May	4		6
June	83	5	254
July	54	9	220
August	12	5	41
September	9	13	42
Total	162	32	563

TABLE 29. Nova Scotia variation orders, fishing prohibitions and special seasons, 1989.

Barney's River	Closed to fishing in those waters upstream from a point 500 m downstream of the number 245 highway bridge crossing the river from January 1 to April 14, 1989.
Chiganois River	Closed to fishing in those waters downstream from the Canadian National Railway Bridge in Belmont to the number 2 Highway from April 15 to May 10, 1989.
Clyde River	Opened to fishing in those waters downstream from Quin's Falls from September 11 to October 15, 1989.
Country Harbour River	Closed to fishing in those waters from Lewis Brook upstream to, but not including Country Harbour Lake, from August 3 to September 1, 1989.
Debert River	Closed to fishing in those waters downstream from the Canadian National Railway bridge to its confluence with the Cobequid Bay from April 15 to May 10, 1989.
East River, Sheet Harbour	Closed to fishing in those waters upstream from a point, as marked by a fishery officer, 200 metres below the Nova Scotia Power Corporation power house to Barrier Dam from June 1 to September 30, 1989.
East River (Pictou County)	Closed to fishing in those waters upstream from the George Street bridge in New Glasgow to the number 583 highway bridge in Springville from January 1 to May 15, 1989.
Economy River	Closed to fishing in those waters downstream from the mouth of Callaghan Brook to the number 2 highway bridge from April 15 to May 10, 1989.
Folly River	Closed to fishing in those waters downstream from the Canadian National Railway bridge to its confluence with the Debert River from April 15 to May 10, 1989.
French River	Closed to fishing in those waters upstream from a point 500 m downstream of the number 245 highway bridge crossing the river from January 1 to April 14, 1989.

TABLE 29. Nova Scotia variation orders, fishing prohibitions and special seasons, 1989. (continued)

Gold River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters from the junction with the Larder River, downstream to a point marked by a fishery officer, approximately 90 m upstream from the number 3 highway bridge crossing that river in the community of Gold River from April 1 to May 9, 1989. (2) Closed to fishing in that portion of the river, as marked by a fishery officer, and known locally as the "Dipping Pool", located between the "Cable Pool" and the "Kill Devil Pool" from June 1 to August 15, 1989. (3) Closed to fishing in those waters downstream from the Rosebank bridge at New Ross to the Trunk 3 highway bridge at Gold River, but not including any tributaries of that river, from August 3 to December 31, 1989.
Grand River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters between those points, as marked by a fishery officer, approximately 90 m upstream and 90 m downstream from Grand River Falls from July 2 to October 15, 1989. (2) Closed to fishing in those waters from the highway bridge at Grand River upstream to Morrison's Bridge at Loch Lomond Lake from July 7 to July 11, and from July 27 to September 14, 1989.
Great Village River	Closed to fishing in those waters downstream from the mouth of Spencer's Brook to the marshland dyke aboiteau from April 15 to May 10, 1989.
Ingonish River	Closed to fishing in all waters from April 15 to May 15, 1989.
Kirby River	Closed to fishing in those waters 15 m downstream and 15 m upstream from the number 24 highway bridge at Sheet Harbour Passage from June 1 to September 30, 1989.
LaHave River	<ul style="list-style-type: none"> (1) Closed to fishing in those waters upstream from Morgan Falls from January 1 to December 31, 1989. (2) Closed to fishing in those waters of the Main Branch downstream from a point at the south end of Wentzells Lake, as marked by a fishery officer, to a point 825 m downstream from the Canadian National Railway bridge from April 1 to May 9, 1989. (3) Closed to fishing in those waters of Wentzells Lake on the Main Branch from April 1 to April 30, 1989. (4) Closed to fishing in those waters of Texas Lake on the North Branch from April 1 to April 30, 1989. (5) Closed to fishing in those waters of New Germany Lake on the Main Branch from April 1 to April 30, 1989. (6) Closed to fishing in those waters immediately below Morgan Falls Fishway, as marked by a fishery officer, from June 1 to December 31, 1989.

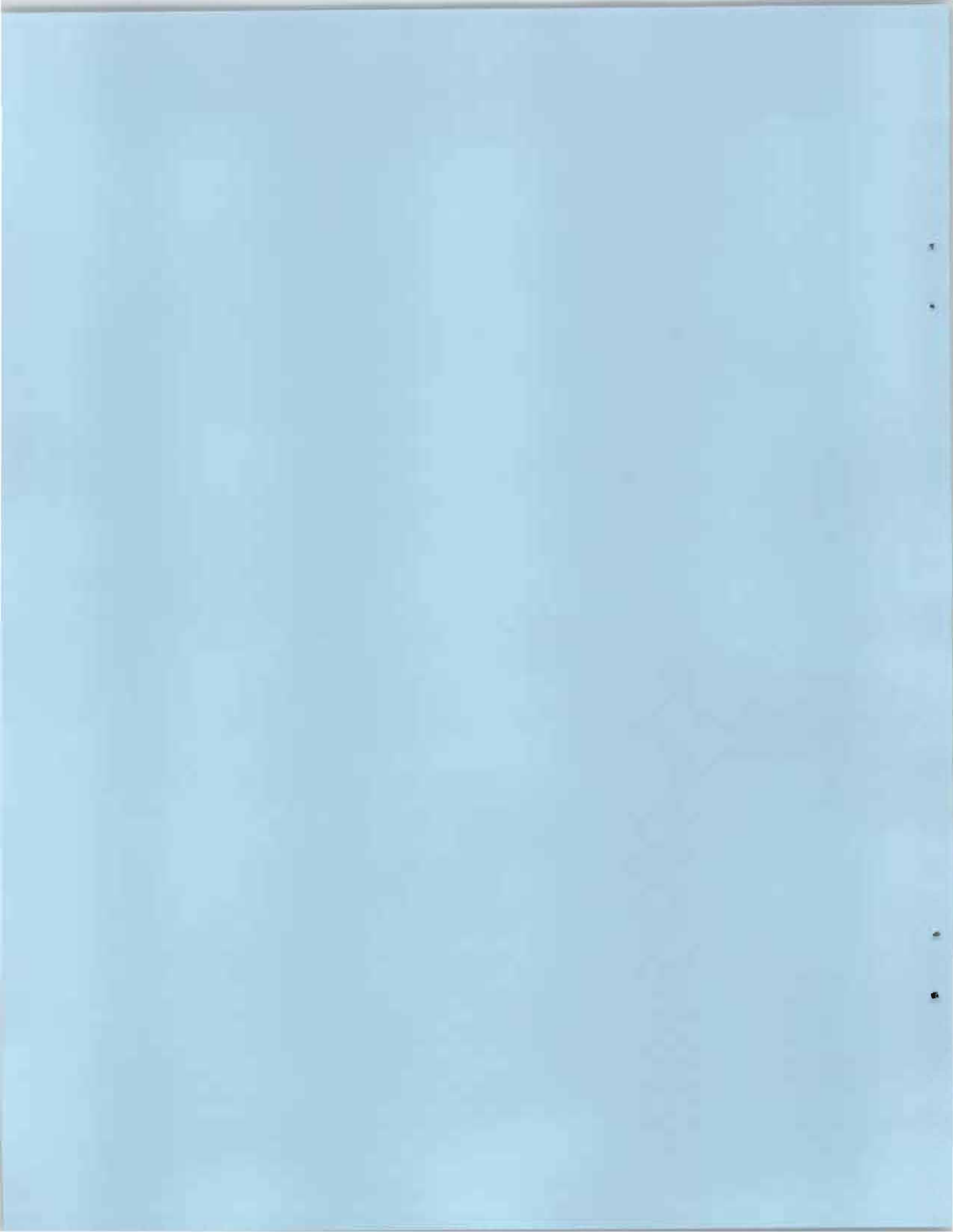
TABLE 29. Nova Scotia variation orders, fishing prohibitions and special seasons, 1989. (continued)

LaHave River (continued)	<p>(7) Opened to fishing in those waters upstream from Morgan Falls, lying between Feindel's Bridge on the Lower Branch Road (highway number 538) in New Germany and the Cherryfield Bridge (highway number 532) at Cherryfield, from June 15 to July 31, 1989.</p> <p>(8) Closed to fishing from August 3 to December 31, 1989</p> <p>(a) in those waters in the North Branch below Sherbrooke Lake, but not including any tributaries of that river;</p> <p>(b) in those waters below New Germany Lake, but not including any tributaries of that river;</p> <p>(c) in those waters below Rhyno Lake, but not including any tributaries of that branch.</p>
Maccan River	Closed to fishing in those waters downstream from the number 2 highway Bridge at Southampton to the highway bridge at Maccan from April 15 to May 10, 1989.
Margaree	Closed to fishing in those waters of the Northeast Branch upstream from the Big Intervale bridge, but not including any tributaries of that branch, from January 1 to December 31, 1989.
Medway	<p>(1) Closed to fishing in those waters from a location marked by a fishery officer above the Westfield highway bridge, upstream to the foot of McGowan Lake, from June 1 to December 31, 1989.</p> <p>(2) Closed to fishing in those waters upstream from the foot of McGowan Lake, including all branches and tributaries, from June 1 to December 31, 1989.</p>
Mersey	Opened to fishing in those waters 25 yards downstream from the lower entrance of the Cowie Falls fishway from September 19 to October 15, 1989.
Musquodoboit River	Closed to fishing in those waters from the sea upstream to and including Plaster Rock Pool from August 4 to December 31, 1989.
North (Colchester)	Closed to fishing in those waters downstream from the mouth of the West Branch North River to its confluence with the Salmon River from April 15 to May 10, 1989.
North (Victoria)	<p>(1) Closed to fishing in those waters upstream from the North River bridge from April 15 to May 31 and from August 2 to September 14, 1989.</p> <p>(2) Closed to fishing from June 1 to December 31, 1989</p> <p>(a) in those waters of the Pot Hole, so called, lying immediately below Little Falls and downstream for a distance of approximately 7.6 m to a point as marked by a fishery officer;</p> <p>(b) in those waters of the Pot Hole, so called, lying immediately below Twin Falls and downstream for a distance of approximately 9.1 m to a point as marked by a fishery officer;</p> <p>(c) in those waters lying immediately below Big Falls and downstream for a distance of approximately 22.8 m to a point as marked by a fishery officer.</p>

TABLE 29. Nova Scotia variation orders, fishing prohibitions and special seasons, 1989. (continued)

Petite Rivière	<p>(1) Closed to fishing in those waters downstream from Hebb Lake, but not including Fancy Lake, to the number 331 highway bridge crossing that river in the community of Petite Rivière from April 1 to May 31, 1989.</p> <p>(2) Closed to fishing in those waters downstream from Hebb Lake, but not including tributaries and not including Fancy Lake, to the number 331 highway bridge crossing that river in the community of Petite Rivière from June 1 to June 14, 1989.</p> <p>(3) Closed to fishing in those waters of Wallace Brook from the junction with the Petite Rivière in the community of Crousetown upstream approximately 180 m to a point marked by a fishery officer from April 1 to September 30, 1989.</p>
Portapique River	Closed to fishing in those waters downstream from the mouth of Matheson Brook to the number 2 highway bridge from April 15 to May 10, 1989.
Pugwash River	Closed to fishing in those waters upstream of the Conn's Mills bridge from January 1 to April 14, 1989.
River Hébert	Closed to fishing in those waters from the bridge near the tree nursery in the Chignecto Game Sanctuary to the number 242 highway bridge at the village of River Hébert from April 15 to May 10, 1989.
Saint Mary's	<p>(1) Closed to fishing in those waters upstream from Number 7 highway bridge (the entire river) from August 3 to August 16, 1989.</p> <p>(2) Opened to fishing in those waters downstream from a point 100 m upstream of Silver's Bridge and downstream from the highway bridge at Glenelg (the main branch) from August 16 to September 15, 1989.</p>
Salmon River (Colchester)	Closed to fishing in those waters downstream from the mouth of Greenfield Brook to the number 102 highway bridge from April 15 to May 10, 1989.
Salmon River (Guysborough)	Closed to fishing in those waters from Spanky's Bridge upstream to, but not including, Salmon River Lake from August 3 to September 17, 1989.
Stewiacke River	Closed to fishing in those waters upstream of the railway bridge in Stewiacke to the Middle Stewiacke bridge in Middle Stewiacke from April 15 to May 15, 1989.
Tusket River	Closed to fishing in those waters from the highway bridge at the southern extremity of Lake Vaughn downstream to the Tusket River hydro station from April 1 to June 30, 1989.
West River, Sheet Harbour	Closed to fishing in those waters upstream from the Killag Road bridge to its source, and including all tributaries, from June 1 to September 30, 1989.

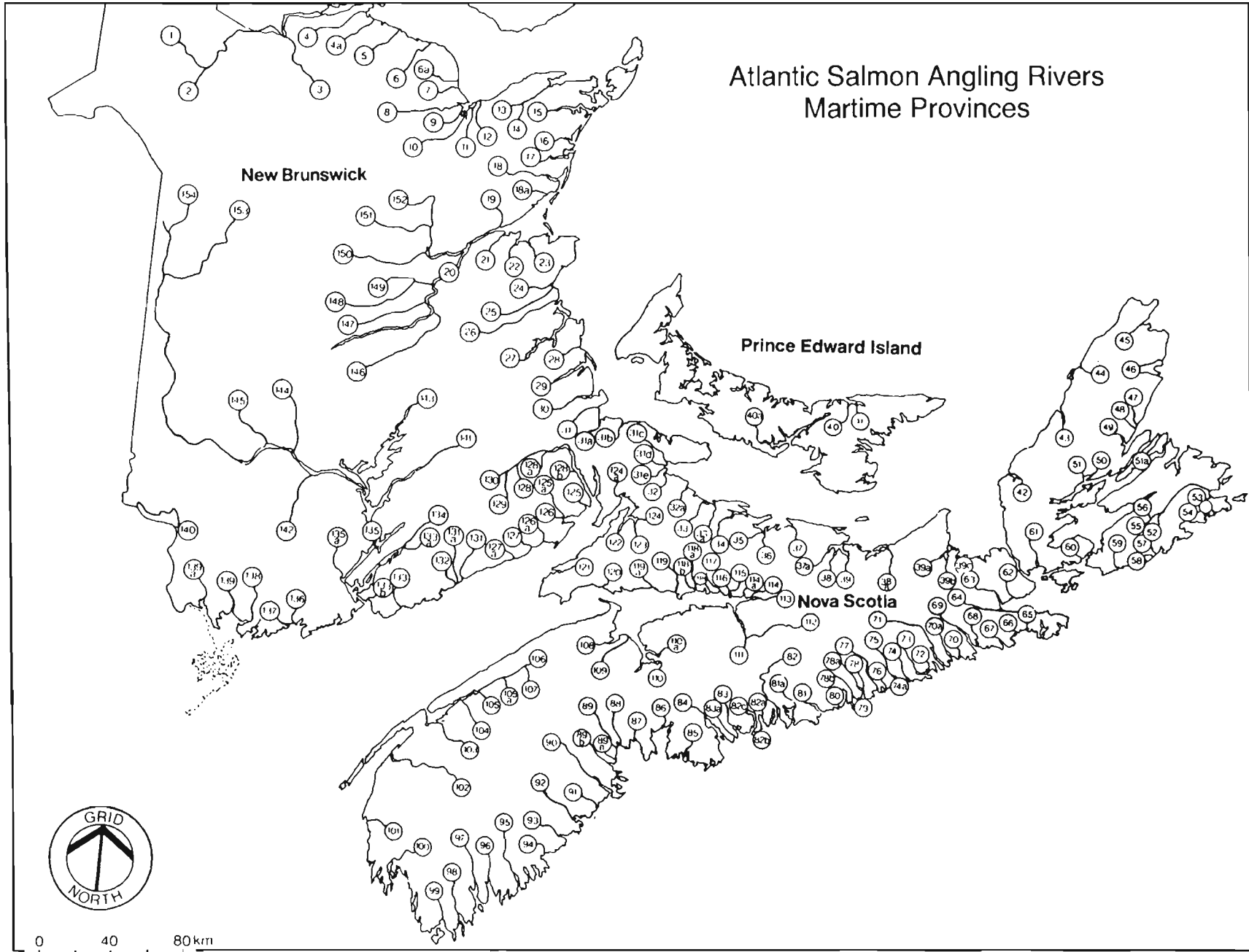
APPENDICES



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Bass (Gloucester Co.)	12	Kouchibouguac	25	Rocky Run	82c
Bay du Vin.	23	Kouchibouguacis(R. St. Louis)	26	Roseway	97
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Chiganois	114a	Marie Joseph.	58	Shediac	31
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Clam Harbour.	62	Medway.	92	Shinimicas.	32a
Clyde	98	Mersey.	93	Ship Harbour.	81
Cocagne	30	Middle (Gloucester Co.)	9	Shubenacadie.	111
Cole Harbour.	65	Middle (Lunenburg Co.)	88	Sissiboo.	102
Cornwallis.	108	Middle (Pictou Co.)	38	South (Antigonish Co.)	39b
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Digdeguash.	139	Moser (Halifax Co.)	75	Stewiacke	112
Diligent.	120	Mosher (Saint John Co.)	132	Tabusintac.	18
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Hammond	133a	Petite Rivière.	91	West - Sheet Harbour.	78a
Harrington.	119a	Pocologan	137		

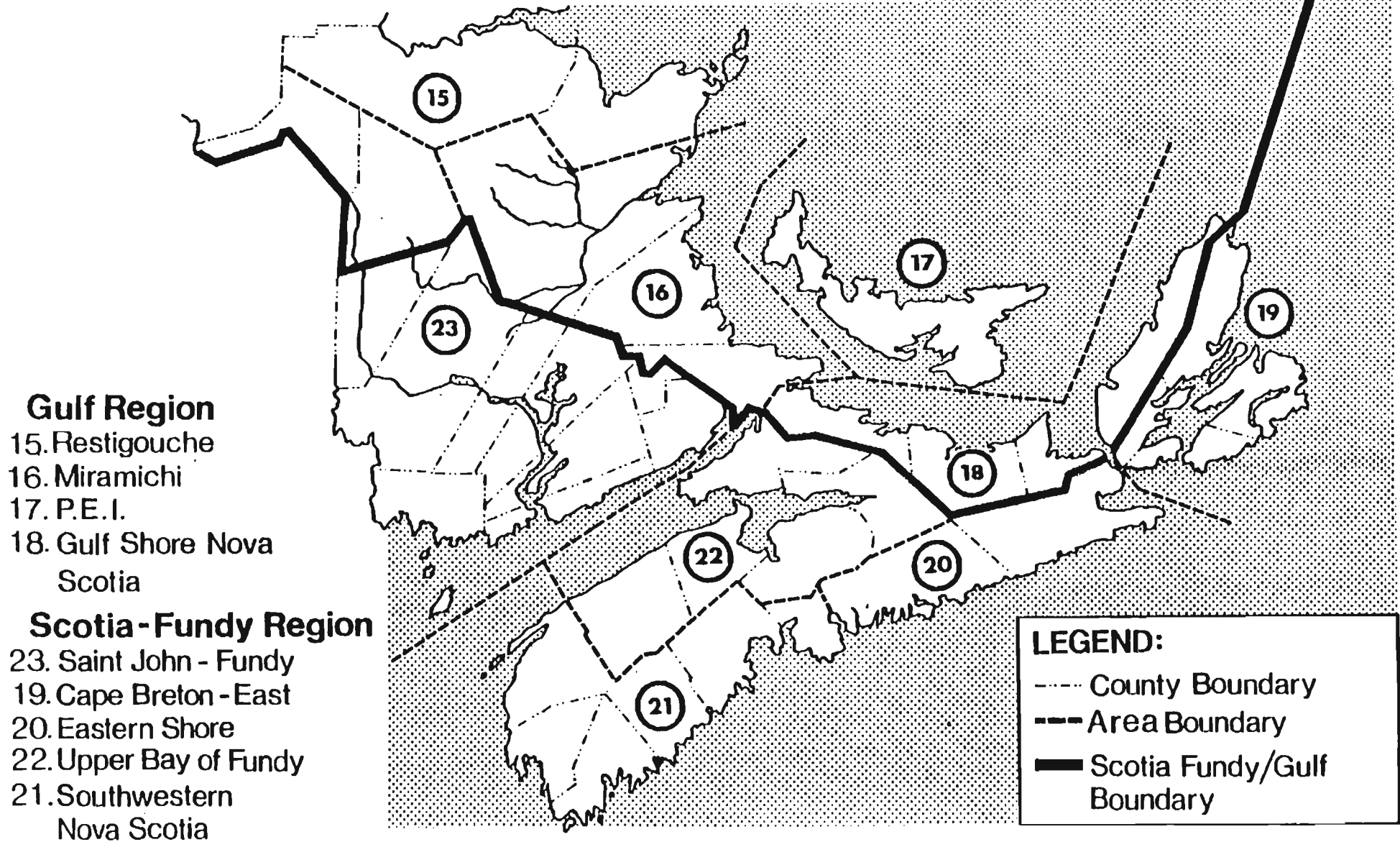
Atlantic Salmon Angling Rivers Martime Provinces



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Eel	4	Catalone	53	Annapolis	106
Charlo	4a	Lorraine	53a	Nictaux	107
Benjamin	5	Gerratt Brook	54	Cornwallis	108
Jacquet	6	Salmon (Cape Breton Co.)	55	Gaspereau (Kings Co.)	109
Nigagoo	6a	Gaspereau (Cape Breton Co.)	56	St. Croix (Hants Co.)	110
Millstream	7	Framboise	57	Kennetcook	110a
Tetagouche	8	Marie Joseph	58	Shubenacadie	111
Middle (Gloucester Co.)	9	Grand	59	Stewiacke	112
Little (Gloucester Co.)	10	River Tillard	60	Salmon (Colchester Co.)	113
Nepisiquit	11	Inhabitants	61	North (Colchester Co.)	114
Bass (Gloucester Co.)	12	Clam Harbour	62	Chiganois	114a
Caraquet	13	Guysborough	63	Debert	115
South Caraquet	14	Salmon (Guysborough Co.)	64	Folly	116
Pokemouche	15	Cole Harbour	65	Great Village	117
Little Tracadie	16	Larry's	66	Portapique	118
Tracadie	17	New Harbour	67	Bass (Colchester Co.)	118a
Tabusintac	18	Isaac's Harbour	68	Little Bass	118b
Burnt Church	18a	Country Harbour	69	Economy	119
Baritbog	19	Indian	70	Harrington	119a
Southwest Miramichi	20	Gegogan	70a	Diligent	120
Napan (Northumberland Co.)	21	St. Mary's	71	Apple	121
Black (Northumberland Co.)	22	Gaspereau Brook	72	River Hebert	122
Bay du Vin	23	Liscomb	73	Maccan	123
Black (Kent Co.)	24	Ecum Secum	74	Napan (Cumberland Co.)	124
Kouchibouguac	25	Necum Teuch (Smith Brook)	74a	Tantramar	124a
Kouchibouguacis (R. St. Louis)	26	Moser (Halifax Co.)	75	Demoiselle	125
Richibucto	27	Quoddy	76	Crooked Creek	125a
Chockpish	28	Salmon - Port Dufferin	77	Shepody	126
Buctouche	29	East - Sheet Harbour	78	West (Albert Co.)	126a
Cocagne	30	West - Sheet Harbour	78a	Alma	127
Shediac	31	Taylor Bay Brook	78b	Pointe Wolfe	127a
Scoudouc	31a	Kirby	79	Coverdale	128
Aboujagane	31b	Tangier	80	Turtle Creek	128a
Timber	31c	Ship Harbour	81	Weldon Creek	128b
Gaspereau (Westmorland Co.)	31d	Salmon (Halifax Co.)	81a	Pollett	129
Baie Verte	31e	Musquodoboit	82	Petitcodiac	130
Tidnish	32	Chezzetcook	82a	Big Salmon	131
Shinimicas	32a	Three Fathom Harbour Brook	82b	Irish	131a
River Philip	33	Rocky Run	82c	Mosher (Saint John Co.)	132
Pugwash	33a	Salmon - Lawrencetown Lake	83	Black (Saint John Co.)	133
Wallace	34	Little Salmon - Lake Major	83a	Hammond	133a
French	35	Sackville	84	Little (Saint John Co.)	133b
Waugh	36	Nine Mile	85	Kennebecasis	134
River John	37	Ingram	86	Saint John	135
West (Pictou Co.)	37a	East (Lunenburg Co.)	87	Nerepis	135a
Middle (Pictou Co.)	38	Middle (Lunenburg Co.)	88	New	136
Barney's	38a	Gold	89	Pocologan	137
East (Pictou Co.)	39	Martins Brook	89a	Magaguadavic	138
West (Antigonish Co.)	39a	Mushamush	89b	Digdeguash	139
South (Antigonish Co.)	39b	LaHave	90	Waweig	139a
Pomquet	39c	Petite Rivière	91	St. Croix (Charlotte Co.)	140
Morell	40	Medway	92	Canaan	141
West (Queens Co.)	40a	Mersey	93	Oromocto	142
Midgell	41	Broad	94	Salmon (Queens Co., N.B.)	143
Mabou	42	Sable	95	Nashwaak	144
Margaree	43	Jordan	96	Keswick	145
Cheticamp	44	Roseway	97	Cains	146
North Aspy	45	Clyde	98	Bartholomew	147
Ingonish	46	Barrington	99	Dungarvon	148
Indian Brook	47	Tusket	100	Renous	149
Barachois	48	Salmon (Digby Co.)	101	Little Southwest Miramichi	150
North (Victoria Co.)	49	Sissiboo	102	Sevogle	151
Baddeck	50	Bear	103	Norhtwest Miramichi	152

SALMON FISHING AREAS



SALMON RIVERS BY FISHING AREA

Fishing areas		Rivers
<u>Gulf Region</u>		
15	Restigouche	Bass, Benjamin, Caraquet, Charlo, Eel, Jacquet, Kedgwick, Little, Little Tracadie, Middle (Gloucester Co.), Millstream, Nepisiguit, Nigadoo, Patapedia, Pokemouche, Restigouche, South Caraquet, Tetagouche, Tracadie, Upsalquitch.
16	Miramichi	Aboujagane, Baie Verte, Bartholomew, Bartibog, Bay du Vin, Black (Kent Co.), Black (Northumberland Co.), Buctouche, Burnt Church, Cains, Chockpish, Cocagne, Dungarvon, Gaspereau (Westmorland Co.), Kouchibouguac, Kouchibouguacis, Little Southwest Miramichi, Napan (Northumberland Co.), Northwest Miramichi, Renous, Richibucto, Scoudouc, Sevogle, Shediac, Southwest Miramichi, Tabusintac, Timber.
17	Prince Edward Island	Midgell, Morell, West (Queens Co.).
18	Gulf Shore Nova Scotia	Barney's, Cheticamp, East (Pictou Co.), French, Mabou, Margaree, Middle (Pictou Co.), Pomquet, Pugwash, River John, River Philip, Shinimikas, South (Antigonish Co.), Tidnish, Wallace, Waugh, West (Antigonish Co.), West (Pictou Co.).
<u>Scotia-Fundy Region</u>		
23	Saint John - Fundy	Alma, Big Salmon, Black (Saint John Co.), Canaan, Coverdale, Crooked Creek, Demoiselle Creek, Digdequash, Hammond, Irish, Kennebecasis, Keswick, Little (Saint John Co.), Magaguadavic, Mosher (Saint John Co.), Nashwaak, Nerepis, New, Oromocto, Peticodiac, Pocologan, Point Wolfe, Pollet, Saint John, St. Croix, Salmon (Queens Co.), Salmon (Victoria Co.), Shepody, Tantramar, Tobique, Turtle Creek, Waweig, Weldon Creek, West (Albert Co.) .
19	Cape Breton East	Aconi Brook, Baddeck, Barachois, Catalone, Framboise, Gaspereau (Cape Breton Co.), Gerratt Brook, Grand, Indian Brook, Ingonish, Inhabitants Lorraine Brook, Marie Joseph, Middle (Victoria Co.), Mira, North Aspy, North (Victoria Co.), River Tillard, Salmon (Cape Breton Co.).
20	Eastern Shore Nova Scotia	Chezzetcook, Clam Harbour, Cole Harbour, Country Harbour, East (Sheet Harbour), Ecum Secum, Gaspereau Brook, Gegogan Brook, Guysborough, Indian, Isaac's Harbour, Kirby, Larry's, Liscomb, Little Salmon (Lake Major), Moser (Halifax Co.), Musquodoboit, New Harbour, Necum Teuch, Quoddy, Rocky Run, St. Mary's, Salmon (Guysborough Co.), Salmon (Halifax Co.), Salmon River (Lawrencetown Lake), Salmon (Port Dufferin), Ship Harbour, Tangier, Taylor Bay Brook, Three Fathom Harbour Brook, West (Sheet Harbour).
22	Upper Bay of Fundy	Annapolis, Apple, Bass (Colchester Co.), Bear, Chiganois, Cornwallis, Debert, Diligent, Economy, Folly, Gaspereau (Kings Co.), Great Village, Harrington, Kennetcook, Lequille, Little Bass, Maccan, Nappan (Cumberland Co.), Nictaux, North (Colchester Co.), Paradise, Portapique, River Hebert, Round Hill, St. Croix (Hants Co.), Salmon (Colchester Co.), Shubenacadie, Stewiacke.
21	Southwest Nova Scotia	Barrington, Broad, Clyde, East (Lunenburg Co.), Gold, Ingram, Jordan, LaHave, Martins Brook, Medway, Mersey, Middle (Lunenburg Co.), Mushamush, Nine Mile, Petite Rivière, Roseway, Sable, Sackville, Salmon (Digby Co.), Sissiboo, Tusket.

APPENDIX 2

CALCULATION OF CATCH AND EFFORT ESTIMATES

Nova Scotia salmon anglers are required to complete and return catch and effort cards which are attached to their licenses. Some cards are returned without prompting. In 1989, a single reminder letter was mailed to those who had not returned cards.

The overall response from the 8,615 licensed anglers was 73%. One hundred and sixty-nine cards were not useable (illegible or incomplete) which left 6,138 completed cards (71.2%) for analysis and estimation of catch and effort.

Extrapolating catch and effort data to estimate totals was accomplished using a ratio technique which was adjusted for response bias. Essentially, the ratio technique is the catch and effort per angler adjusted upwards to reflect catch and effort for the total number of licensees. The "ratio" is L/r where L is the number of licenses sold and r is the total number of responses (licensed stubs) received. For example, the estimated total provincial effort (\hat{e}_p) is calculated:

$$\hat{e}_p = \frac{L}{r} \times e_p$$

where \hat{e}_p = estimated provincial angler effort and e_p is the total reported provincial effort from all license stubs received. This procedure is repeated to estimate catch. Estimation of total catch and effort for each river is achieved in the same manner. Calculation of all estimates requires application of the bias adjustment factor, as described below.

An adjustment for bias is necessary because of the nature of the survey. Participants in an activity, when asked to voluntarily supply information related to that activity, typically respond at rates reflective of their level of interest. In other words, the more active or interested anglers are more likely to respond than are the casual fishermen. As a result, the data received does not represent the average angler but the more successful or more active angler. This phenomenon is commonly known as response bias. Extrapolation from the "biased" data to account for the catch of nonrespondents would result in an overestimate of catch and effort. Hence the need for a bias adjustment factor.

CALCULATION OF A BIAS ADJUSTMENT FACTOR

During the years 1983-87, as many as three reminder letters were sent to nonrespondents.

The resulting response, which exceeded 90% in all years, was extrapolated to 100% using a regression technique described in O'Neil et al. (1989).

Angler responses for the 1983-87 seasons were placed in one of four categories depending on when they were received: before prompting - voluntary (VOL); after the first reminder letter - post prompt 1 (PP1); after the second reminder letter - post prompt 2 (PP2); and after the third reminder letter - post prompt 3 (PP3). Estimates of catch and effort extrapolated from the combined data from the four response categories had to account for less than 10% nonresponse. These estimates are referred to below as "complete" estimates. In 1989, since only a single reminder letter was used, data were confined to the VOL and PP1 categories.

A bias adjustment factor was arrived at as follows:

- Step (1) data from each of the previous five years (1983-87) was separated to produce VOL and PP1 categories.
- Step (2) The resulting VOL + PP1 data was extrapolated to account for supposed nonresponse using the ratio technique described above.
- Step (3) The resulting biased catch and effort estimates calculated in step two, for all five years, were compared with the complete estimates to calculate a weighted mean ratio of complete to biased estimates. The ratio was applied to the biased 1989 data to adjust for response bias.

As a means of testing the validity of applying a five-year weighted mean bias adjustment factor, regressions describing the relationship between response rate and angler effort were compared for the 1983-87 period. An analysis of covariance indicated that the slopes and intercepts were similar ($p > 0.05$). Therefore, it could be concluded that angler behaviour with respect to response, i.e., response bias, was similar in five separate years. Accordingly, application of that trend to adjust the 1989 and subsequent years biased estimates provide more realistic estimates of catch and effort.

APPENDIX 3

GLOSSARY

- angle (angled) - to fish (fished) with rod and line using an artificial fly.
- bright fish - a mature, adult Atlantic salmon that has entered fresh water prior to spawning.
- CAFSAC - The Canadian Atlantic Fisheries Scientific Advisory Committee.
- catch per unit effort - the number of large salmon or grilse caught, either retained or released, per rod-day.
- CPUE - abbreviation for catch per unit effort.
- estimated catch - catch reported by anglers plus an estimate of catch by anglers who have not reported. A description of the estimation technique is provided in Appendix 2.
- fecundity - number of eggs per unit body weight (relative fecundity).
- grilse - an adult Atlantic salmon which matures after one winter at sea.
- harvest - fish removed from the population. Harvest, retained catch and kill are synonymous. Harvest does not include released fish.
- kelt - an adult Atlantic salmon that has spawned and has not yet left fresh water after spawning prior to its return to the ocean.
- large salmon - an adult Atlantic salmon that has matured after two or more winters in the ocean.
- license stub - a post card attached to the Atlantic salmon license which provides for reporting catch and effort data.
- multi-sea-winter salmon - a maturing adult Atlantic salmon that has spent more than one winter at sea; synonymous with large salmon.
- observed catch - the sum of the catch from license stubs of anglers who reported.
- one-sea-winter salmon - an adult Atlantic salmon which matured after one winter at sea; synonymous with grilse.
- released fish - a fish which is not killed upon being caught but is released alive into the river. The release may be by breaking or cutting the line or by removing the hook from a landed fish.
- retained fish - an Atlantic salmon which is killed upon being angled.
- rod-day - any part of a day spent fishing on a river is considered a rod-day. An angler may fish a "rod-day" on more than one river in one day. For example, an angler who fishes two rivers in one day has fished two rod-days, one rod-day on each river.
- spawn (verb) - the act of reproduction in fish.
- stock - a genetically unique strain of Atlantic salmon which homes to a single river is typically thought of as an Atlantic salmon stock.
- word-of-mouth - a method of gathering catch and effort data which is based on some observation, some personal accounts of catch or effort and much hearsay and guesswork to account for that which was not observed.

