

# **Capture and Distribution of Atlantic Salmon in the Mactaquac Area, Saint John River System, 1977-82**

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## **Canadian Data Report of Fisheries and Aquatic Sciences**

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Le titre exact paraît au haut du résumé de chaque rapport.

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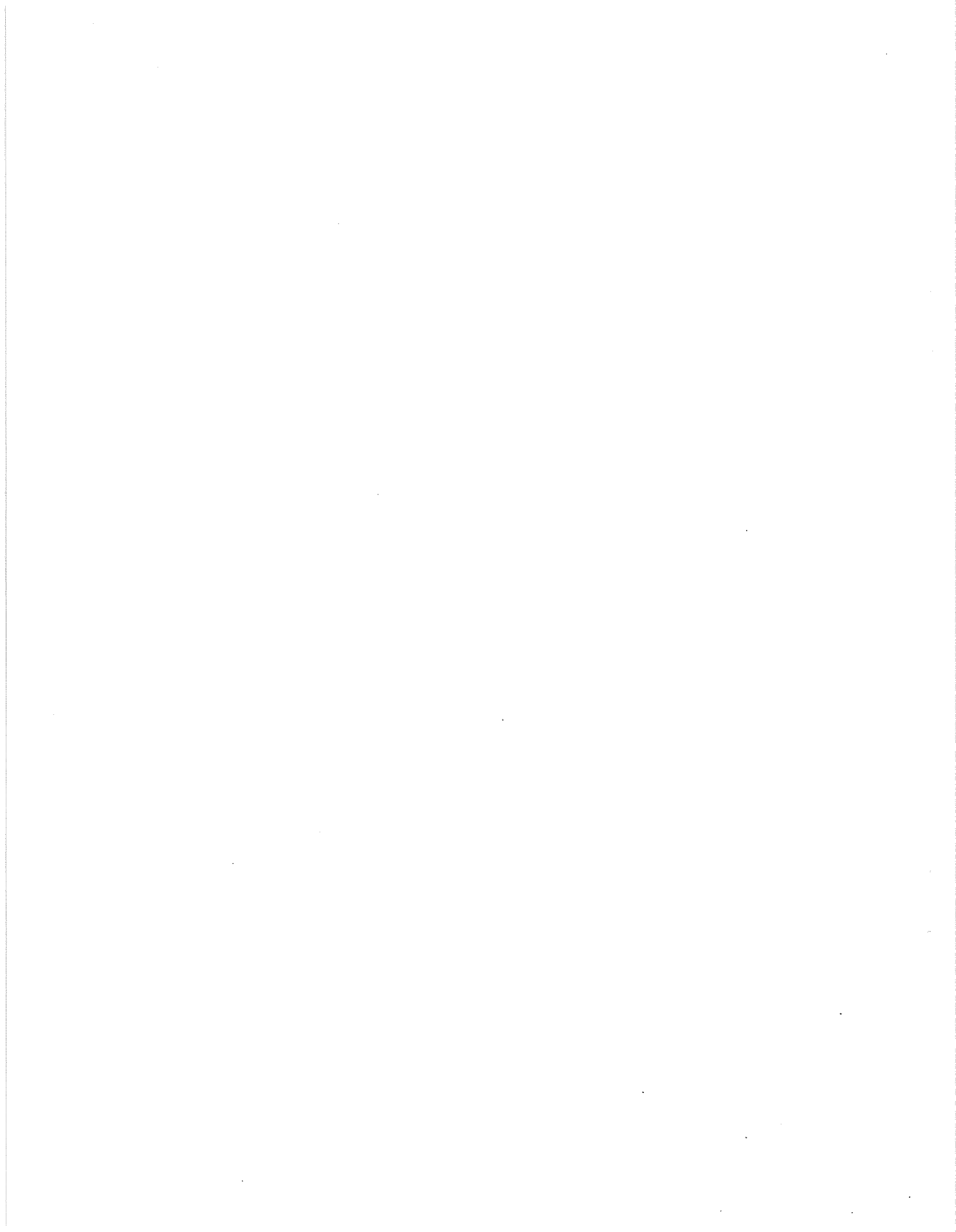
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## ABSTRACT

Ingram, J.H. 1985. Capture and distribution of Atlantic salmon in the Mactaquac area, Saint John River system, 1977-82. Can. Data Rep. Fish. Aquat. Sci. No. 508. vii + 59 p.

This report provides counts and summaries of wild and hatchery one-sea-winter and multi-sea-winter Atlantic salmon ascending Mactaquac Dam fish collection facilities and the Mactaquac Hatchery migration channel on the Saint John River, New Brunswick, 1977-82. Distributions include the numbers of male and female fish of wild and hatchery origins retained as broodstock and those trucked to upriver release sites. Counts of other species, including alewives and blueback herring which ascended Mactaquac Dam fish collection facilities, are also summarized.

Key words: Saint John River, Mactaquac Dam, fish collection facilities, Mactaquac Hatchery, Atlantic salmon, grilse, broodstock, other species, fish distribution, migration channel.

## RÉSUMÉ

Ingram, J.H. 1985. Capture and distribution of Atlantic salmon in the Mactaquac area, Saint John River system, 1977-82. Can. Data Rep. Fish. Aquat. Sci. No. 508. vii + 59 p.

Ce rapport contient, les résultats du dénombrements et des renseignements sommaires sur les saumons de l'Atlantique nés en milieu naturel ou en élevage qui ont passé un ou plusieurs hivers en mer et qui ont remontés la passe migratoire du barrage Mactaquac et le chenal de migration de la station de pisciculture Mactaquac sur la rivière Saint-John (Nouveau-Brunswick) de 1977 à 1982. On donne le nombre de mâles et de femelles parmi les poissons sauvages et les poissons d'élevage qui ont été retenus pour la reproduction ou qui ont été transportés par camion jusqu'à divers points de lâchage en amont. On donne aussi des renseignements sommaires sur les dénombrements d'autres espèces y compris le gaspareu et l'aloise d'été, qui ont aussi remontés jusqu'aux installations de capture du barrage Mactaquac.

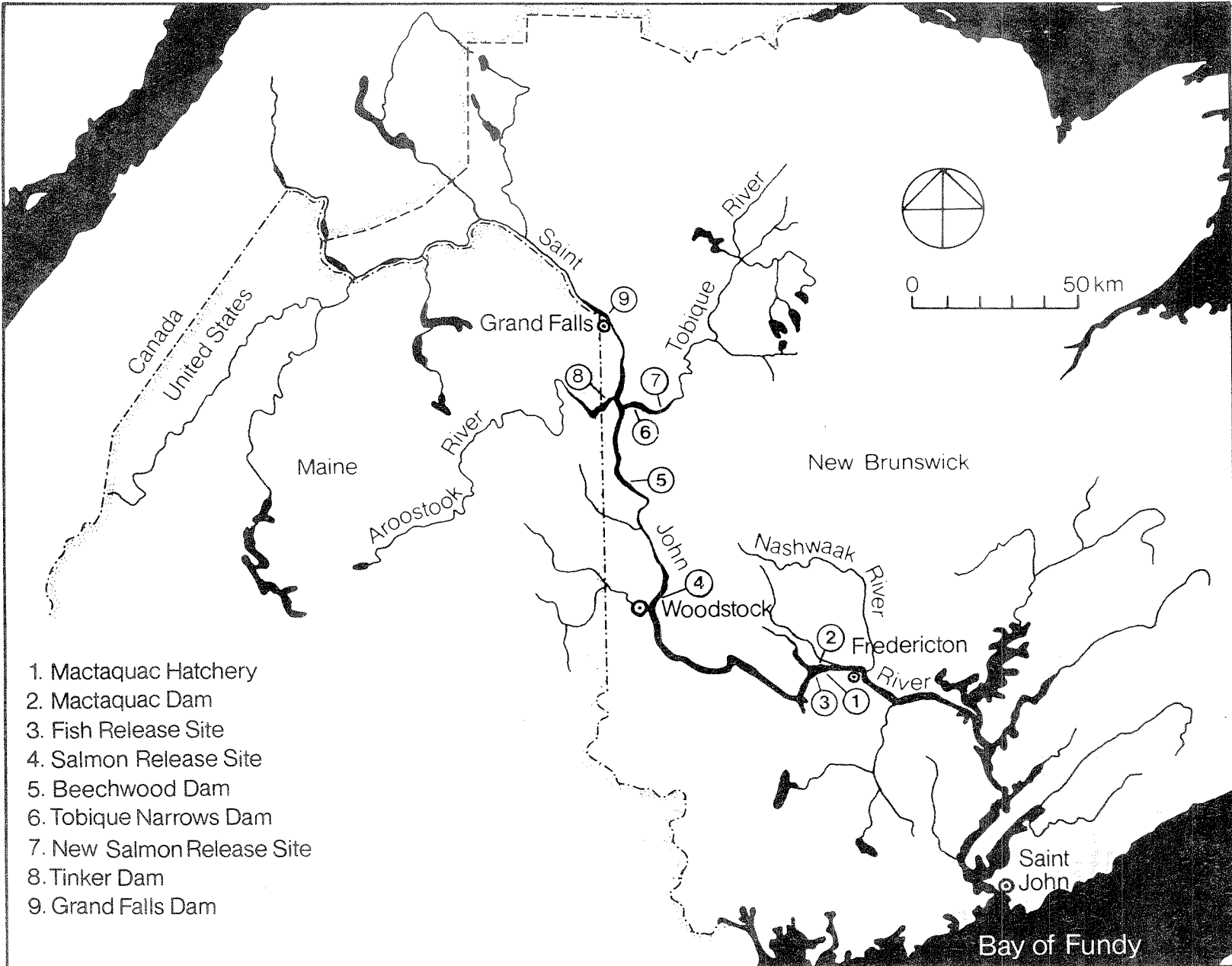


FIG. 1. Major power dams and salmon release sites, Saint John River system, New Brunswick.

INTRODUCTION

The Mactaquac hydroelectric power dam, which spans the main stem of the Saint John River about 16 km upstream from Fredericton, New Brunswick, first became operational in 1968. To compensate for expected losses in natural production of Atlantic salmon (*Salmo salar*), a hatchery was also built that year about 2 km below the dam.

Most upriver-migrating fish ascend the Mactaquac Dam fish collection facilities built along the downstream face of the powerhouse. In addition, some salmon, mainly of hatchery origin, ascend the smolt migration channel or water outflow of the hatchery. Adults of hatchery origin can be identified by fin clips or tags which had been applied to smolts prior to their release.

To enable easier sorting of salmon and to obtain biological data on each, secondary sorting facilities were built at the hatchery in 1971.

This report provides daily and summary counts of anadromous Atlantic salmon captured at Mactaquac facilities from 1977 to 1982 and updates earlier data compilations for the years 1967-71 (Smith 1979) and 1972-76 (Ingram 1980). Also included are summary counts and estimates of other fish species ascending the Mactaquac Dam fish collection facilities.

PRESENTATION OF DATA

The tables and appendices of this report detail counts of Atlantic salmon taken at both the fish collection facilities of Mactaquac Dam and the trap in the smolt migration channel from the Mactaquac Hatchery.

Of the salmon released above Mactaquac, a small percentage sometimes falls back below the dam and may be counted a second time. Counts in this report are not adjusted for the fallback.

Salmon from the dam's collection facilities are trucked to a holding pool attached to the secondary sorting facilities at the hatchery. Depending on the number of salmon available, they may be held overnight or longer before being counted through the secondary sorting facilities. Fish from the migration channel trap are normally removed just before or during a sorting operation. The dates shown in the tables are those when the fish were counted through the secondary sorting facilities.

In this report, the term "salmon" refers to fish which have spent one or more winters at sea before returning to home waters; i.e., it includes both grilse and older (large) salmon. Age at maturity is indicated as follows: grilse, or one-sea-winter fish, (1-SW), and older or large salmon, or multi-sea-winter fish, (M-SW).

The sex of the salmon was determined by external examination only. The removal of adipose fins from all hatchery-reared smolts permitted identification of both wild and hatchery-origin returning adults as they passed through the secondary sorting facilities.

The numbers of fish of species other than Atlantic salmon were estimated when transferred from the brail pool to the hopper at the fish collection facilities of the dam. Some small fish are able to pass through the wire mesh of the hopper and barrier gates, and it is impossible to determine the number that end up in the fish tank truck.

TABLE 1. Operating periods and dates on which first and last 1-SW (grilse) and M-SW (salmon) fish were taken at Mactaquac fish collection facilities and hatchery migration channel trap, 1977-82.

Year	Mactaquac Dam fish collection facilities						Hatchery migration channel trap					
	Operating period	First fish taken		Last fish taken		Operating period	First fish taken		Last fish taken			
		1-SW	M-SW	1-SW	M-SW		1-SW	M-SW	1-SW	M-SW		
1977	19 May-28 Oct	9 Jun	29 May	28 Oct	28 Oct	27 May-28 Oct	2 Jun	30 May	28 Oct	28 Oct		
1978	24 May-27 Oct	19 Jun	28 May	26 Oct	26 Oct	7 Jun-28 Oct	19 Jun	7 Jun	27 Oct	27 Oct		
1979	23 May-30 Oct	22 Jun	30 May	29 Oct	30 Oct	14 Jun-31 Oct	20 Jun	20 Jun	31 Oct	24 Oct		
1980	12 May-28 Oct	2 Jun	12 May	28 Oct	28 Oct	5 Jun-27 Oct	24 Jun	9 Jun	27 Oct	27 Oct		
1981	11 May-27 Oct	15 Jun	14 May	27 Oct	20 Oct	8 Jun-27 Oct	3 Jul	9 Jun	27 Oct	27 Oct		
1982	17 May-27 Oct	21 Jun	23 May	27 Oct	27 Oct	10 Jun-28 Oct	1 Jul	11 Jun	28 Oct	21 Oct		

TABLE 2. Semi-monthly totals of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, passed through Mactaquac Hatchery secondary sorting facilities, 1977-82. (Daily counts in Appendix A).

Semi-monthly period	Fish facilities at dam				Migration channel at hatchery				Totals	
	1-SW		M-SW		1-SW		M-SW		1-SW	M-SW
	Wild	Hatchery	Wild	Hatchery	Wild	Hatchery	Wild	Hatchery		
<b>1977</b>										
16-31 May	0	0	1	0	0	0	0	2	0	3
1-15 Jun	1	0	5	0	0	2	0	21	3	26
16-30 Jun	1	0	50	4	0	0	0	5	1	59
1-15 Jul	1,181	1,420	2,626	766	0	149	0	60	2,750	3,452
16-31 Jul	1,345	1,777	2,565	584	2	480	0	79	3,604	3,228
1-15 Aug	333	503	727	130	1	214	0	30	1,051	887
16-31 Aug	132	224	357	68	0	201	0	22	557	447
1-15 Sep	92	147	248	45	0	124	0	13	363	306
16-30 Sep	291	310	541	108	0	198	0	44	799	693
1-15 Oct	106	100	101	15	0	116	0	41	322	157
16-31 Oct	21	31	36	4	0	205	0	34	257	74
Totals	3,503	4,512	7,257	1,724	3	1,689	0	351	9,707	9,332
<b>1978</b>										
16-31 May	0	0	1	0	0	0	0	0	0	1
1-15 Jun	0	0	5	0	0	0	0	23	0	28
16-30 Jun	35	28	227	109	0	4	1	20	67	357
1-15 Jul	429	345	1,142	713	0	30	0	11	804	1,866
16-31 Jul	577	632	543	405	0	135	0	24	1,344	972
1-15 Aug	208	188	132	80	0	82	0	19	478	231
16-31 Aug	48	86	58	18	0	79	0	4	213	80
1-15 Sep	60	169	283	142	2	180	0	45	411	470
16-30 Sep	84	163	330	156	1	83	0	20	331	506
1-15 Oct	84	110	193	59	1	79	0	16	274	268
16-31 Oct	53	58	119	46	2	105	0	41	218	206
Totals	1,578	1,779	3,033	1,728	6	777	1	223	4,140	4,985
<b>1979</b>										
16-31 May	0	0	3	0	0	0	0	0	0	3
1-15 Jun	0	0	0	0	0	0	0	0	0	0
16-30 Jun	21	8	73	15	1	4	1	12	34	101
1-15 Jul	2,748	890	1,277	464	0	98	0	20	3,736	1,761
16-31 Jul	1,792	719	257	125	1	117	0	17	2,629	399
1-15 Aug	419	299	28	14	1	45	0	2	764	44
16-31 Aug	347	285	106	41	1	82	0	3	715	150
1-15 Sep	247	188	97	37	0	135	0	28	570	162
16-30 Sep	444	192	93	29	2	163	0	32	801	154
1-15 Oct	188	131	50	18	1	82	0	23	402	91
16-31 Oct	20	10	8	4	1	73	0	8	104	20
Totals	6,226	2,722	1,992	747	8	799	1	145	9,755	2,885
<b>1980</b>										
1-15 May	0	0	1	0	0	0	0	0	0	1
16-31 May	0	0	6	0	0	0	0	0	0	6
1-15 Jun	3	1	106	18	0	0	0	8	4	132
16-30 Jun	127	150	1,498	317	0	9	1	14	285	1,830
1-15 Jul	1,270	972	3,289	793	1	158	0	23	2,401	4,105
16-31 Jul	2,936	2,389	1,266	387	2	562	0	38	5,889	1,691
1-15 Aug	1,438	1,354	355	151	2	582	0	20	3,376	526
16-31 Aug	494	812	311	76	3	365	1	27	1,674	415
1-15 Sep	127	246	167	46	3	410	0	33	785	246
16-30 Sep	570	513	774	157	0	339	0	64	1,422	995
1-15 Oct	514	227	315	36	3	395	2	51	1,139	404
16-31 Oct	62	23	64	11	0	252	1	24	337	100
Totals	7,541	6,687	8,152	1,992	14	3,072	5	302	17,314	10,451

TABLE 2 (continued)

Semi-monthly period	Fish facilities at dam				Migration channel at hatchery				Totals	
	1-SW		M-SW		1-SW		M-SW		1-SW	M-SW
	Wild	Hatchery	Wild	Hatchery	Wild	Hatchery	Wild	Hatchery		
<b>1981</b>										
1-15 May	0	0	1	0	0	0	0	0	0	1
16-31 May	0	0	18	1	0	0	0	0	0	19
1-15 Jun	1	0	47	16	0	0	0	17	1	80
16-30 Jun	27	17	312	132	0	0	1	19	44	464
1-15 Jul	1,590	912	1,256	524	1	75	0	17	2,578	1,797
16-31 Jul	1,761	1,139	269	132	2	164	0	20	3,066	421
1-15 Aug	365	191	82	22	1	69	0	8	626	112
16-31 Aug	200	78	238	55	1	102	0	11	381	304
1-15 Sep	210	181	80	43	2	140	1	15	533	139
16-30 Sep	224	154	74	17	2	136	0	5	516	96
1-15 Oct	165	133	57	18	1	161	0	9	460	84
16-31 Oct	16	56	5	3	2	74	0	5	148	13
Totals	4,559	2,861	2,439	963	12	921	2	126	8,353	3,530
<b>1982</b>										
16-31 May	0	0	3	3	0	0	0	0	0	6
1-15 Jun	0	0	68	17	0	0	1	8	0	94
16-30 Jun	66	10	542	194	0	0	0	32	76	768
1-15 Jul	1,353	271	1,024	276	0	29	0	6	1,653	1,306
16-31 Jul	1,281	478	219	59	0	56	0	5	1,815	283
1-15 Aug	565	355	84	18	1	208	0	4	1,129	106
16-31 Aug	160	156	117	25	3	231	1	13	550	156
1-15 Sep	241	88	126	28	2	135	0	3	466	157
16-30 Sep	187	80	44	15	1	78	0	2	346	61
1-15 Oct	57	18	13	5	1	44	0	5	120	23
16-31 Oct	13	8	12	0	0	47	0	10	68	22
Totals	3,923	1,464	2,252	640	8	828	2	88	6,223	2,982

TABLE 3. Distribution summary of wild and hatchery, male and female, 1-SW (grilse) and M-SW (salmon) fish from the Mactaquac secondary sorting facilities, 1977-82.

Distribution	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<b>1977</b>										
Released at:										
- Woodstock	1,484	25	2,792	91	299	2,725	152	669	4,392	3,845
- Tobique	1,741	9	2,784	45	374	3,303	159	770	4,579	4,606
- In tributaries	209	35	405	58	53	407	29	143	707	632
Released below Mactaquac	0	0	22	1	4	6	3	4	23	17
Retained for broodstock	0	0	0	0	32	52	56	90	0	230
Mortalities and others	3	0	2	1	0	2	0	0	6	2
Totals	3,437	69	6,005	196	762	6,495	399	1,676	9,707	9,332
<b>1978</b>										
Released at:										
- Woodstock	700	24	1,199	46	130	1,101	142	649	1,969	2,022
- Tobique	770	25	1,207	35	188	1,436	180	802	2,037	2,606
- In tributaries	0	0	34	2	0	0	7	35	36	42
- Below Mactaquac	59	2	21	2	9	87	13	26	84	135
Retained for broodstock	0	0	0	0	28	48	38	50	0	164
Mortalities and others	4	0	10	0	2	5	1	8	14	16
Totals	1,533	51	2,471	85	357	2,677	381	1,570	4,140	4,985
<b>1979</b>										
Released at:										
- Woodstock	3,208	88	1,843	65	80	683	110	252	5,240	1,125
- Tobique	2,731	70	1,341	36	97	980	68	333	4,178	1,478
- In tributaries	90	41	52	11	7	76	10	30	194	123
- Perth-Andover	4	0	171	0	0	0	0	0	175	0
Retained for broodstock	0	0	0	0	26	41	31	56	0	154
Mortalities and others	2	0	2	0	1	2	1	1	4	5
Totals	6,035	199	3,409	112	211	1,782	220	672	9,755	2,885
<b>1980</b>										
Released at:										
- Woodstock	3,686	187	4,453	355	392	2,832	105	555	8,691	3,884
- Tobique	3,447	154	4,415	274	568	4,010	235	837	8,290	5,650
- In tributaries	76	0	99	1	46	221	27	26	176	320
- St. Croix River system	0	0	106	12	0	0	125	201	118	326
Retained for broodstock	0	0	0	0	30	50	70	102	0	252
Mortalities and others	3	2	32	2	0	8	4	7	39	19
Totals	7,212	343	9,115	644	1,036	7,121	566	1,728	17,314	10,451
<b>1981</b>										
Released at:										
- Woodstock	2,206	68	2,006	92	65	714	39	266	4,372	1,084
- Tobique	2,262	35	1,596	73	143	1,417	90	483	3,966	2,133
- In tributaries	0	0	3	0	21	1	41	64	3	127
Retained for broodstock	0	0	0	0	25	53	27	61	0	166
Mortalities and others	0	0	10	2	0	2	4	14	12	20
Totals	4,468	103	3,615	167	254	2,187	201	888	8,353	3,530
<b>1982</b>										
Released at:										
- Woodstock	1,946	107	1,043	77	34	542	5	83	3,173	664
- Tobique	1,780	91	1,054	37	78	1,463	27	251	2,962	1,819
- In tributaries	3	1	78	0	35	16	88	122	82	261
Retained for broodstock	0	0	0	0	23	53	38	83	0	197
Mortalities and others	2	1	3	0	7	3	9	22	6	41
Totals	3,731	200	2,178	114	177	2,077	167	561	6,223	2,982

TABLE 4. Semi-monthly totals of wild and hatchery, male and female, 1-SW (grilse) and M-SW (salmon) fish released at Woodstock dumpsite, 1977-82. (Daily numbers in Appendix B).

Semi-monthly period	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<b>1977</b>										
1-15 Jun	1	0	2	0	1	2	10	2	3	15
16-30 Jun	0	0	0	0	3	2	8	7	0	20
1-15 Jul	504	1	649	2	141	967	51	254	1,156	1,413
16-31 Jul	554	0	998	1	71	917	47	227	1,553	1,262
1-15 Aug	100	1	230	8	20	245	6	44	339	315
16-31 Aug	112	9	355	22	35	300	18	68	498	421
1-15 Sep	51	3	106	11	7	105	2	16	171	130
16-30 Sep	127	10	218	17	20	174	4	23	372	221
1-15 Oct	27	0	75	7	0	0	3	11	109	14
16-31 Oct	0	0	0	0	0	0	0	0	0	0
1-15 Nov	8	1	159	23	1	13	3	17	191	34
Totals	1,484	25	2,792	91	299	2,725	152	669	4,392	3,845
<b>1978</b>										
1-15 Jun	0	0	0	0	4	2	5	18	0	29
16-30 Jun	8	0	11	0	9	55	6	34	19	104
1-15 Jul	178	0	164	9	47	398	43	232	351	720
16-31 Jul	220	1	271	1	23	198	17	149	493	387
1-15 Aug	170	0	245	1	2	72	2	43	416	119
16-31 Aug	32	3	119	4	4	37	3	15	158	59
1-15 Sep	22	4	152	15	13	132	27	68	193	240
16-30 Sep	14	3	55	5	7	59	13	29	77	108
1-15 Oct	41	7	106	7	13	104	20	20	161	157
16-31 Oct	15	6	76	4	8	44	6	41	101	99
Totals	700	24	1,199	46	130	1,101	142	649	1,969	2,022
<b>1979</b>										
16-30 Jun	0	0	1	0	5	22	3	5	1	35
1-15 Jul	985	8	318	5	26	383	27	120	1,316	556
16-31 Jul	1,217	0	411	0	14	146	8	40	1,628	208
1-15 Aug	228	3	185	1	4	12	0	5	417	21
16-31 Aug	87	30	127	20	2	15	0	3	264	20
1-15 Sep	65	4	92	8	5	28	5	16	169	54
16-30 Sep	362	18	330	12	5	39	11	14	722	69
1-15 Oct	140	1	191	1	0	7	3	5	333	15
16-31 Oct	123	24	174	17	0	9	8	9	338	26
1-15 Nov	1	0	14	1	19	22	45	35	16	121
Totals	3,208	88	1,843	65	80	683	110	252	5,204	1,125
<b>1980</b>										
1-15 May	0	0	0	0	0	1	0	0	0	1
16-31 May	0	0	0	0	4	2	0	0	0	6
1-15 Jun	0	0	0	0	0	0	0	0	0	0
16-30 Jun	40	1	55	2	117	536	21	109	98	783
1-15 Jul	662	9	564	12	112	1,127	37	207	1,247	1,483
16-31 Jul	1,371	20	1,258	41	82	539	12	87	2,690	720
1-15 Aug	738	36	912	74	4	62	9	31	1,760	106
16-31 Aug	252	19	644	77	11	141	11	50	992	213
1-15 Sep	41	12	218	32	4	40	4	20	303	68
16-30 Sep	299	41	425	52	31	216	8	28	817	283
1-15 Oct	182	27	140	16	15	118	0	0	365	133
16-31 Oct	101	22	247	49	12	50	3	23	419	88
Totals	3,686	187	4,463	355	392	2,832	105	555	8,691	3,884

TABLE 4 (continued)

Semi-monthly period	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
1981										
16-31 May	0	0	0	0	1	2	0	0	0	3
1-15 Jun	0	0	0	0	8	15	1	12	0	36
16-30 Jun	3	1	4	0	4	50	2	8	8	64
1-15 Jul	739	2	494	5	20	387	19	171	1,240	597
16-31 Jul	856	3	661	10	4	51	1	23	1,530	79
1-15 Aug	168	7	139	1	6	50	2	8	315	66
16-31 Aug	23	0	19	3	6	16	3	5	45	30
1-15 Sep	69	19	87	12	8	48	1	13	187	70
16-30 Sep	259	24	363	37	8	65	8	13	683	94
1-15 Oct	45	6	68	6	0	13	1	6	125	20
16-31 Oct	33	3	96	2	0	15	0	4	134	19
1-15 Nov	11	3	75	16	0	2	1	3	105	6
Totals	2,206	68	2,006	92	65	714	39	266	4,372	1,084
1982										
16-30 Jun	12	0	2	0	0	121	2	27	14	150
1-15 Jul	638	12	162	0	11	218	1	20	812	250
16-31 Jul	958	15	306	6	6	107	0	21	1,285	134
1-15 Aug	2	0	0	0	0	0	0	0	2	0
16-31 Aug	105	8	229	19	8	30	0	3	361	41
1-15 Sep	81	23	122	20	7	38	1	8	246	54
16-30 Sep	93	27	114	14	1	7	0	0	248	8
1-15 Oct	39	11	43	10	0	9	0	1	103	10
16-31 Oct	18	11	65	8	1	12	1	3	102	17
Totals	1,946	107	1,043	77	34	542	5	83	3,173	664

TABLE 5. Semi-monthly totals of wild and hatchery, male and female, 1-SW (grilse) and M-SW (salmon) fish released at Tobique dumpsite, 1977-82. (Daily numbers in Appendix C).

Semi-monthly periods	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
1977										
16-30 Jun	1	0	0	0	15	26	2	3	1	46
1-15 Jul	626	0	759	5	170	1,151	59	343	1,390	1,723
16-31 Jul	843	0	1,391	0	114	1,576	52	297	2,234	2,039
1-15 Aug	229	4	474	17	24	423	19	91	724	557
16-31 Aug	0	0	0	0	0	0	0	0	0	0
1-15 Sep	42	5	160	23	11	116	3	16	230	146
16-30 Sep	0	0	0	0	0	0	0	0	0	0
1-15 Oct	0	0	0	0	0	0	0	0	0	0
16-31 Oct	0	0	0	0	0	0	0	0	0	0
1-15 Nov	0	0	0	0	40	11	24	20	0	95
Totals	1,741	9	2,784	45	374	3,303	159	770	4,579	4,606
1978										
16-30 Jun	16	0	14	0	26	78	15	52	30	171
1-15 Jul	157	0	124	0	49	515	46	253	281	863
16-31 Jul	336	3	434	1	22	316	24	224	774	586
1-15 Aug	62	1	62	1	1	29	1	20	126	51
16-31 Aug	45	2	90	2	4	29	5	13	139	51
1-15 Sep	36	3	182	22	9	121	14	71	243	215
16-30 Sep	48	6	159	7	31	202	26	94	220	353
1-15 Oct	35	6	51	0	11	77	4	7	92	99
16-31 Oct	33	4	83	2	10	61	11	29	122	111
1-15 Nov	2	0	8	0	25	8	34	39	10	106
Totals	770	25	1,207	35	188	1,436	180	802	2,037	2,606



TABLE 5 (continued)

Semi-monthly period	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<b>1979</b>										
16-30 Jun	4	0	0	0	9	33	6	9	4	57
1-15 Jul	1,187	5	412	4	60	609	38	196	1,608	903
16-31 Jul	1,051	7	419	0	19	211	15	74	1,477	319
1-15 Aug	133	9	94	4	1	6	0	3	240	10
16-31 Aug	244	25	265	19	4	89	0	33	553	126
1-15 Sep	112	24	151	9	4	32	9	18	296	63
16-30 Sep	0	0	0	0	0	0	0	0	0	0
1-15 Oct	0	0	0	0	0	0	0	0	0	0
16-31 Oct	0	0	0	0	0	0	0	0	0	0
Totals	2,731	70	1,341	36	97	980	68	333	4,178	1,478
<b>1980</b>										
1-15 Jun	2	1	0	0	20	71	2	13	3	106
16-30 Jun	78	1	86	5	99	638	37	125	170	899
1-15 Jul	536	14	465	21	231	1,858	70	373	1,036	2,532
16-31 Jul	1,441	19	1,475	40	85	544	27	100	2,975	756
1-15 Aug	715	14	1,021	49	32	280	36	110	1,799	458
16-31 Aug	202	23	412	43	13	146	13	28	680	200
1-15 Sep	36	7	263	30	5	34	7	17	336	63
16-30 Sep	117	23	279	23	34	206	15	37	442	292
1-15 Oct	239	34	258	32	27	170	0	4	563	201
16-31 Oct	81	18	156	31	11	57	1	3	286	72
1-15 Nov	0	0	0	0	11	6	27	27	0	71
Totals	3,447	154	4,415	274	568	4,010	235	837	8,290	5,650
<b>1981</b>										
1-15 Jun	0	0	0	0	7	11	0	1	0	19
16-30 Jun	21	1	5	3	32	201	23	109	30	365
1-15 Jul	847	3	484	8	36	745	36	245	1,342	1,062
16-31 Jul	866	2	589	11	27	221	8	72	1,468	328
1-15 Aug	225	2	136	6	7	23	1	7	369	38
16-31 Aug	120	14	87	13	23	163	3	19	234	208
1-15 Sep	102	9	149	17	1	24	5	15	277	45
16-30 Sep	0	0	0	0	0	0	0	0	0	0
1-15 Oct	81	4	146	15	0	25	2	4	246	31
16-31 Oct	0	0	0	0	0	0	0	0	0	0
1-15 Nov	0	0	0	0	10	4	12	11	0	37
Totals	2,262	35	1,596	73	143	1,417	90	483	3,966	2,133
<b>1982</b>										
1-15 Jun	0	0	0	0	2	48	1	23	0	74
16-30 Jun	45	1	7	0	5	302	7	86	53	400
1-15 Jul	691	2	128	1	37	791	13	109	822	950
16-31 Jul	323	3	194	4	5	111	0	12	524	128
1-15 Aug	536	23	523	8	4	79	0	7	1,090	90
16-31 Aug	35	12	106	9	6	59	2	8	162	75
1-15 Sep	77	24	45	7	11	46	0	2	153	59
16-30 Sep	73	26	51	8	8	27	4	4	158	43
1-15 Oct	0	0	0	0	0	0	0	0	0	0
16-31 Oct	0	0	0	0	0	0	0	0	0	0
Totals	1,780	91	1,054	37	78	1,463	27	251	2,962	1,819

TABLE 6. Site locations for releases of salmon in Saint John River tributaries, 1977-82.

Site no.	River of release	Location	Topographic coordinates	Map <sup>1</sup>
1	Becaguimec River	Carlisle	46°21'N; 67°23'W	21 J/6 W
2	Becaguimec River	Howard Brook	46°23'N; 67°23'W	21 J/6 W
3	Meduxnekeag River	Hagerman Brook	46°14'N; 67°44'W	21 J/4 E
4	Nackawic River	Temperance Vale	46°04'N; 67°15'W	21 J/3 E
5	Northeast Nackawic River	Caverhill Bridge	46°04'N; 67°11'W	21 J/3 E
6	Salmon River (Grand Falls)	Sutherland Brook	47°05'N; 67°33'W	21 O/4 E
7	Salmon River (Grand Falls)	Above Simpson Brook	47°15'N; 67°30'W	21 O/4 E
8	Salmon River (Grand Falls)	Above Poitras Brook	47°17'N; 67°30'W	21 O/5 E
9	Salmon River (Grand Falls)	Below Foley Brook	47°03'N; 67°35'W	21 O/4 E
10	Shikatehawk River	Kenneth (ford)	46°32'N; 67°25'W	21 J/11 W
11	Tobique River	Brown Flats	46°56'N; 67°25'W	21 J/14 W
12	Tobique River - Campbell River	Above Nictau Bridge	47°14'N; 67°08'W	21 O/3 E
13	Tobique River - Little Tobique River	Lawson Brook	47°28'N; 66°59'W	21 O/7 W
14	Tobique River - Little Tobique River	Pat's Crossing	47°29'N; 67°01'W	21 O/6 E
15	Tobique River - Mamozekel River	Forks, at South Brook	47°21'N; 67°01'W	21 O/6 E
16	Tobique River - Odellach River	Hollin's Field	46°47'N; 67°28'W	21 J/14 W
17	Tobique River - Odellach River	Crabbe's Mill Pond	46°47'N; 67°30'W	21 J/14 W
18	Tobique River - Serpentine River	Hazelton Brook	47°16'N; 66°56'W	21 O/7 W
19	Tobique River - Serpentine River	Below Salmon Hole	47°12'N; 66°49'W	21 O/2 W

1. National Topographic Series, scale 1:50,000.

TABLE 7. Distributions of wild and hatchery, male and female, 1-SW (grilse) and M-SW (salmon) fish from Mactaquac into Saint John River tributaries, 1977-82. (Daily numbers in Appendix D).

River of release	Site no. <sup>1</sup>	1-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<b>1977</b>											
Becaguimec	1 & 2	100	13	102	21	20	128	1	19	236	168
Meduxnekeag	3	7	1	13	0	0	19	0	0	21	19
Nackawic	4 & 5	17	1	56	7	6	43	3	18	81	70
Salmon (Grand Falls)	6 & 7	42	9	99	10	17	121	6	23	160	167
Tobique											
Little Tobique	13 & 14	21	9	63	11	4	48	4	29	104	83
Odellach	16	0	0	47	6	0	15	15	56	53	71
Serpentine	18	22	2	25	3	6	48	0	0	52	54
Totals		209	35	405	58	53	407	29	143	707	632
<b>1978</b>											
Tobique											
Odellach	17	0	0	34	2	0	0	7	35	36	42
<b>1979</b>											
Becaguimec	1	64	30	36	8	6	52	4	19	138	81
Shikatehawk	10	26	11	16	3	1	24	6	11	56	42
Totals		90	41	52	11	7	76	10	30	194	123
<b>1980</b>											
Becaguimec	1	30	0	32	1	20	77	8	12	63	117
Salmon (Grand Falls)	8 & 9	29	0	52	0	21	106	15	11	81	153
Shikatehawk	10	17	0	15	0	5	38	4	3	32	50
Totals		76	0	99	1	46	221	27	26	176	320
<b>1981</b>											
Tobique											
Little Tobique	13	0	0	1	0	10	0	14	25	1	49
Mamozekel	15	0	0	0	0	5	1	5	9	0	20
Serpentine	19	0	0	2	0	6	0	22	30	2	58
Totals		0	0	3	0	21	1	41	64	3	127
<b>1982</b>											
Tobique at Brown Flats	11	3	1	59	0	5	6	8	11	63	30
Campbell	12	0	0	19	0	0	0	31	50	19	81
Serpentine	18	0	0	0	0	30	10	49	61	0	150
Totals		3	1	78	0	35	16	88	122	82	261

1. See Table 6.

TABLE 8. Special-study releases of wild and hatchery, male and female, 1-SW (grilse) and M-SW (salmon) fish captured at Mactaquac, 1977-1980. (Daily releases in Appendix E).

River and location of release/recapture	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>1977</u>										
Saint John River, below Mactaquac at Sugar Island.	0	0	82	8	10	20	6	10	90	46
Returned to Mactaquac	0	0	60	7	6	14	3	6	67	29
Remained below Mactaquac	0	0	22	1	4	6	3	4	23	17
<u>1978</u>										
Saint John River below Mactaquac at Springhill Bk.	109	5	118	5	20	169	23	115	237	327
Returned to Mactaquac	50	3	97	3	11	82	10	89	153	192
Remained below Mactaquac	59	2	21	2	9	87	13	26	84	135
<u>1979</u>										
Saint John River at Perth-Andover	4	0	171	0	0	0	0	0	175	0
<u>1980</u>										
St. Croix River	0	0	106	12	0	0	125	201	118	326

TABLE 9. Numbers and periods of capture for wild and hatchery, male and female, M-SW fish (salmon) collected at Mactaquac for use as broodstock, 1977-82.

Collection	M-SW (Salmon)				Totals
	Wild		Hatchery		
	Male	Female	Male	Female	
<u>1977</u>					
Summer (20 Jun-1 Aug)	22	38	45	75	180
Fall (6-22 Sep)	10	14	11	15	50
Totals	32	52	56	90	230
<u>1978</u>					
Summer (19 Jun-14 Aug)	20	35	30	38	123
Fall (5-25 Sep)	8	13	8	12	41
Totals	28	48	38	50	164
<u>1979</u>					
Summer (25 Jun-29 Aug)	21	29	25	44	119
Fall (6 Sep-9 Oct)	5	12	6	12	35
Totals	26	41	31	56	154
<u>1980</u>					
Summer (2 Jun-20 Jul)	22	39	53	76	190
Fall (5 Sep-27 Oct)	8	11	17	26	62
Totals	30	50	70	102	252
<u>1981</u>					
Summer (15 Jun-26 Aug)	15	39	23	48	125
Fall (8 Sep-20 Oct)	10	14	4	13	41
Totals	25	53	27	61	166
<u>1982</u>					
Summer (8 Jun-31 Aug)	20	39	36	71	166
Fall (17 Sep-21 Oct)	3	14	2	12	31
Totals	23	53	38	83	197

1. The Research Centre, St. Andrews, was provided with 10 male and 17 female summer-run, hatchery M-SW fish.

TABLE 10. Annual estimated counts of particular<sup>1</sup> fish species other than Atlantic salmon ascending Mactaquac fish collection facilities, 1977-82. (Semi-monthly counts in Appendix G).

Species		Numbers of fish					
Scientific name	Common name	1977	1978	1979	1980	1981	1982
<u>Alosa pseudoharengus</u>	Alewife <sup>2</sup> -into headpond	484,600	496,900	599,800	663,200	552,800	637,900
	-taken commercially	3,728,700	3,946,900	2,462,100	3,143,000	1,791,200	1,037,700
<u>Alosa sapidissima</u>	Shad-into headpond	154	142	185	561	487	18
	-taken commercially	1,240	1,098	894	911	513	1,080
<u>Catostomus</u> sp.	Sucker (common & longnose)	0	0	0	20	0	0
<u>Coregonus clupeaformis</u>	Lake whitefish	18	90	184	17	5	49
<u>Esox niger</u>	Chain pickerel	5	1	2	2	2	4
<u>Micropterus dolomieu</u>	Smallmouth bass	4	9	15	14	9	8
<u>Petromyzon marinus</u>	Lamprey	25	8	5	47	0	0
<u>Roccus saxatilis</u>	Striped bass	0	54	16	6	187	141
<u>Salmo salar</u>	Sebago (landlocked salmon)	2	9	17	50	28	39
<u>Salmo trutta</u>	Brown trout	0	1	1	8	5	2
<u>Salvelinus fontinalis</u>	Brook (speckled) trout	0	9	29	56	26	141

1. Fish, such as eels and perch, which pass through the wire-mesh openings of the facilities, are not counted.
2. For breakdown by alewife and blueback herring, see Table 11.

TABLE 11. Estimated semi-monthly and annual totals for alewives and for blueback herring released into the headpond and taken commercially from the Mactaquac Dam fish collection facilities, 1977-82.<sup>1</sup>

Time period	Numbers of fish collected			
	Released in headpond		Taken commercially	
	Alewife	Blueback	Alewife	Blueback
<u>1977</u>				
16-31 May	248,900	0	439,600	0
1-15 Jun	16,100	0	1,939,278	125,622
16-30 Jun	14,223	115,077	319,142	622,858
1-15 Jul	19,271	71,029	66,880	215,320
Totals	298,494	186,106	2,764,900	963,800
<u>1978</u>				
16-31 May	231,800	0	95,000	0
1-15 Jun	62,024	3,976	2,428,830	243,270
16-30 Jun	28,519	144,481	554,077	625,723
1-15 Jul	6,954	19,146	0	0
Totals	329,297	167,603	3,077,907	868,993
<u>1979</u>				
16-31 May	226,275	4,925	139,367	12,063
1-15 Jun	97,337	18,063	1,070,640	321,660
16-30 Jun	8,931	127,569	259,528	658,842
1-15 Jul	1,143	107,557	0	0
16-31 Jul	0	8,000	0	0
Totals	333,686	266,114	1,469,535	992,565
<u>1980</u>				
1-15 May	68,200	0	0	0
16-31 May	189,653	1,947	1,052,680	58,170
1-15 Jun	47,690	75,060	839,120	555,370
16-30 Jun	23,919	179,681	36,179	601,481
1-15 Jul	0	57,500	0	0
16-31 Jul	0	18,600	0	0
1-15 Aug	0	950	0	0
Totals	329,462	333,738	1,927,979	1,215,021
<u>1981</u>				
1-15 May	144,000	0	0	0
16-31 May	150,600	0	870,848	43,554
1-15 Jun	25,946	122,754	431,926	394,206
16-30 Jun	7,203	100,297	1,013	49,653
1-15 Jul	160	1,840	0	0
Totals	327,909	224,891	1,303,787	487,413
<u>1982</u>				
16-31 May	451,324	20,126	0	0
1-15 Jun	69,412	9,888	371,114	479,848
16-30 Jun	3,271	58,379	5,586	181,152
1-15 Jul	1,530	23,970	0	0
Totals	525,537	112,363	376,700	661,000

1. Data obtained from B.M. Jessop, Biologist, Freshwater and Anadromous Division, Fisheries Research Branch, Halifax.



## APPENDIX A

DAILY ATLANTIC SALMON COUNTS,  
MACTAQUAC HATCHERY  
SECONDARY SORTING FACILITIES, 1977-82

Numbers include 1-SW (grilse) and M-SW (salmon) fish of wild and hatchery origins, taken at both the Mactaquac Dam collection facilities and the Mactaquac Hatchery migration channel. Dates are those during which the fish were processed through the secondary sorting facilities and not necessarily the dates on which they were first recovered.

TABLE A-1. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1977.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u>										
29	0	1	0	0	0	0	0	0	0	1
30	0	0	0	0	0	0	0	2	0	2
<u>June</u>										
1	0	0	0	0	0	0	0	1	0	1
2	0	0	0	0	0	0	2	6	2	6
6	0	2	0	0	0	0	0	3	0	5
9	1	0	0	0	0	0	0	0	1	0
13	0	1	0	0	0	0	0	5	0	6
15	0	2	0	0	0	0	0	6	0	8
16	0	1	0	0	0	0	0	3	0	4
17	0	1	0	0	0	0	0	1	0	2
20	0	12	0	2	0	0	0	0	0	14
21	0	8	0	0	0	0	0	0	0	8
22	0	2	0	0	0	0	0	0	0	2
24	0	5	0	0	0	0	0	1	0	6
27	1	17	0	1	0	0	0	0	1	18
30	0	4	0	1	0	0	0	0	0	5
<u>July</u>										
4	8	127	9	17	0	0	2	1	19	145
5	4	24	5	10	0	0	2	0	11	34
6	17	92	38	24	0	0	7	3	62	119
7	18	144	56	56	0	0	15	11	89	211
8	43	111	39	38	0	0	13	6	95	155
9	93	372	77	86	0	0	0	0	170	458
10	135	253	132	85	0	0	28	23	295	361
11	199	332	207	110	0	0	0	0	406	442
12	139	233	142	58	0	0	30	4	311	295
13	114	336	148	92	0	0	10	6	272	434
14	257	394	339	147	0	0	0	0	596	541
15	154	208	228	43	0	0	42	6	424	257
16	151	211	155	53	0	0	46	6	352	270
17	241	361	251	116	0	0	35	10	527	487
18	201	289	303	74	0	0	28	7	532	370
19	59	147	123	43	0	0	23	2	205	192
20	98	166	124	26	0	0	60	9	282	201
21	88	156	110	46	1	0	31	5	230	207
22	62	100	126	26	0	0	35	7	223	133
23	64	80	79	22	1	0	26	2	170	104
24	187	537	266	90	0	0	18	2	471	629
25	76	214	70	34	0	0	6	0	152	248
26	48	125	60	14	0	0	44	9	152	148
27	24	50	20	12	0	0	42	3	86	65
28	23	66	38	3	0	0	58	15	119	84
29	23	63	52	25	0	0	28	2	103	90
<u>August</u>										
2	125	278	194	55	0	0	34	6	353	339
3	8	24	18	2	0	0	18	7	44	33
4	18	30	30	14	0	0	23	5	71	49
5	13	54	37	9	0	0	11	0	61	63
8	40	78	70	15	0	0	32	4	142	97
9	44	28	43	7	0	0	23	3	110	38
11	21	75	30	6	0	0	38	3	89	84
12	16	27	12	0	1	0	22	2	51	29
15	48	133	69	22	0	0	13	0	130	155
16	7	19	16	4	0	0	21	2	44	25
18	8	26	16	3	0	0	27	1	51	30
19	10	20	15	3	0	0	15	5	40	28
22	33	86	73	16	0	0	0	0	106	102
23	12	45	10	3	0	0	33	3	55	51
24	9	28	14	6	0	0	14	2	37	36
26	11	38	21	7	0	0	17	2	49	47



TABLE A-1. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<b>August</b>										
29	29	73	45	24	0	0	48	4	122	101
30	2	0	3	0	0	0	17	1	22	1
31	11	22	11	2	0	0	9	2	31	26
<b>September</b>										
1	12	38	15	3	0	0	9	2	36	43
6	33	71	55	12	0	0	18	0	106	83
7	4	16	10	5	0	0	34	3	48	24
9	7	10	7	5	0	0	43	3	57	18
13	25	82	43	14	0	0	14	1	82	97
14	11	31	17	6	0	0	6	4	34	41
16	26	92	43	27	0	0	6	2	75	121
19	75	89	70	13	0	0	0	0	145	102
20	34	76	33	9	0	0	39	3	106	88
21	14	13	19	1	0	0	4	2	37	16
22	13	39	16	9	0	0	9	0	38	48
23	13	47	20	6	0	0	13	5	46	58
26	51	96	63	23	0	0	32	13	146	132
27	27	49	21	10	0	0	14	3	62	62
28	11	12	13	4	0	0	26	5	50	21
29	24	23	7	3	0	0	35	8	66	34
30	3	5	5	3	0	0	20	3	28	11
<b>October</b>										
3	22	21	26	4	0	0	51	14	99	39
4	15	11	9	2	0	0	3	2	27	15
5	8	7	9	4	0	0	5	1	22	12
6	2	2	5	0	0	0	0	1	7	3
7	4	5	8	1	0	0	1	2	13	8
11	53	48	37	2	0	0	35	16	125	66
13	2	7	6	2	0	0	21	5	29	14
17	11	11	14	2	0	0	35	14	60	27
19	2	11	5	0	0	0	24	2	31	13
21	6	2	7	1	0	0	45	5	58	8
24	0	0	0	0	0	0	25	3	25	3
25	0	5	4	0	0	0	3	2	7	7
28	2	6	1	0	0	0	73	8	76	14
31	0	1	0	1	0	0	0	0	0	2
<b>Totals</b>	<b>3,503</b>	<b>7,257</b>	<b>4,512</b>	<b>1,724</b>	<b>3</b>	<b>0</b>	<b>1,689</b>	<b>351</b>	<b>9,707</b>	<b>9,332</b>

TABLE A-2. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1978.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u> 28	0	1	0	0	0	0	0	0	0	1
<u>June</u> 7	0	0	0	0	0	0	0	2	0	2
8	0	0	0	0	0	0	0	4	0	4
12	0	0	0	0	0	0	0	17	0	17
14	0	3	0	0	0	0	0	0	0	3
15	0	2	0	0	0	0	0	0	0	2
19	1	26	0	11	0	0	1	7	2	44
21	0	4	0	1	0	0	1	0	1	5
22	2	15	3	5	0	1	0	3	5	24
23	0	1	0	1	0	0	0	2	0	4
26	12	72	6	31	0	0	1	6	19	109
27	7	41	5	23	0	0	0	0	12	64
28	1	15	1	4	0	0	0	0	2	19
29	2	24	6	20	0	0	1	2	9	46
30	10	29	7	13	0	0	0	0	17	42
<u>July</u> 3	37	189	19	113	0	0	0	0	56	302
4	35	213	16	95	0	0	5	1	56	309
5	2	47	2	45	0	2	1	3	5	95
6	26	38	11	29	0	0	0	0	37	67
7	40	90	35	50	0	0	2	3	77	143
8	57	141	48	72	0	0	3	3	108	216
9	22	106	35	61	0	0	3	0	60	167
10	65	126	58	85	0	0	0	0	123	211
11	11	4	17	14	0	0	3	1	31	19
12	12	9	12	11	0	0	2	0	26	20
13	75	101	53	62	0	0	6	0	134	163
14	47	78	39	76	0	0	5	0	91	154
16	125	138	104	108	0	0	6	0	235	246
17	54	77	45	42	0	0	6	0	105	119
18	34	42	46	37	0	0	9	1	89	80
19	30	32	50	36	0	0	9	1	89	69
20	87	84	89	60	0	0	14	0	190	144
21	56	50	65	34	0	0	8	3	129	87
24	82	76	124	62	0	0	12	4	218	142
25	16	10	26	4	0	0	12	5	54	19
26	10	3	8	5	0	0	26	6	44	14
28	35	7	32	5	0	0	17	4	84	16
31	48	24	43	12	0	0	16	0	107	36
<u>August</u> 1	14	7	14	5	0	0	6	0	34	12
2	14	6	21	4	0	0	4	1	39	11
3	14	6	10	2	0	0	2	1	26	9
4	11	7	12	4	0	0	5	4	28	15
8	86	55	74	42	0	0	12	3	172	100
9	7	3	1	0	0	0	9	1	17	4
10	11	10	17	6	0	0	9	1	37	17
11	30	21	24	12	0	0	15	2	69	35
14	18	11	13	5	0	0	13	6	44	22
15	3	6	2	0	0	0	7	0	12	6
16	14	11	20	3	0	0	20	2	54	16
17	6	3	13	0	0	0	2	1	21	4
18	3	0	3	0	0	0	15	0	21	0
21	10	24	32	9	0	0	5	0	47	33
22	0	0	0	0	0	0	3	0	3	0
23	3	3	3	3	0	0	6	0	12	6
24	2	1	2	0	0	0	2	0	6	1
25	2	2	0	0	0	0	5	0	7	2
28	3	4	5	1	0	0	5	0	13	5
29	0	1	3	0	0	0	6	0	9	1
30	4	3	2	0	0	0	4	1	10	4
31	1	6	3	2	0	0	6	0	10	8

TABLE A-2. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>September</u>										
1	1	4	4	1	0	0	13	1	18	6
5	9	28	22	11	1	0	25	2	57	41
6	3	10	5	3	0	0	26	0	34	13
7	3	14	13	6	0	0	10	0	26	20
8	6	43	23	19	0	0	12	1	41	63
11	13	47	22	18	0	0	14	2	49	67
12	9	47	29	25	0	0	28	22	66	94
13	4	11	18	18	0	0	15	6	37	35
14	2	24	11	13	1	0	16	2	30	39
15	10	55	22	28	0	0	21	9	53	92
18	33	103	51	57	1	0	26	9	111	169
19	5	14	6	13	0	0	9	2	20	29
20	1	14	13	9	0	0	8	3	22	26
21	4	21	5	6	0	0	0	0	9	27
22	12	39	24	16	0	0	4	0	40	55
25	18	82	36	27	0	0	10	0	64	109
26	1	7	4	6	0	0	4	1	9	14
27	4	22	14	13	0	0	10	3	28	38
28	2	25	5	6	0	0	8	1	15	32
29	4	3	5	3	0	0	4	1	13	7
<u>October</u>										
2	19	41	30	15	0	0	17	4	66	60
3	4	14	5	4	0	0	9	0	18	18
4	0	9	6	4	0	0	1	0	7	13
5	3	11	4	6	0	0	5	1	12	18
6	5	22	11	2	0	0	0	1	16	25
10	31	51	34	17	1	0	29	7	95	75
12	18	40	17	10	0	0	14	3	49	53
13	4	5	3	1	0	0	4	0	11	6
16	16	26	11	6	0	0	16	3	43	35
17	13	32	14	13	1	0	6	7	34	52
18	6	10	12	7	0	0	19	7	37	24
20	11	20	12	10	0	0	23	8	46	38
24	5	22	7	9	0	0	22	12	34	43
26	2	9	2	1	1	0	12	2	17	12
27	0	0	0	0	0	0	7	2	7	2
<u>Totals</u>	1,578	3,033	1,779	1,728	6	1	777	223	4,140	4,985

TABLE A-3. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1979.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u>										
30	0	1	0	0	0	0	0	0	0	1
31	0	2	0	0	0	0	0	0	0	2
<u>June</u>										
20	0	5	0	0	1	1	0	7	1	13
21	0	2	0	0	0	0	0	1	0	3
22	3	14	0	1	0	0	0	1	3	16
25	9	39	4	12	0	0	1	2	14	53
26	1	7	0	1	0	0	1	1	2	9
27	1	2	1	0	0	0	0	0	2	2
29	7	4	3	1	0	0	2	0	12	5
<u>July</u>										
1	74	151	24	78	0	0	0	0	98	229
2	184	300	68	92	0	0	4	2	256	394
3	69	94	22	46	0	0	0	0	91	140
4	4	0	2	1	0	0	5	1	11	2
5	22	17	14	5	0	0	4	1	40	23
6	37	35	25	10	0	0	3	2	65	47
8	450	176	133	71	0	0	16	0	599	247
9	350	167	121	37	0	0	0	0	471	204
10	177	59	39	15	0	0	0	0	216	74
11	256	68	81	24	0	0	13	3	350	95
12	321	22	117	22	0	0	12	1	450	45
13	116	11	41	8	0	0	20	4	177	23
14	156	39	69	22	0	0	11	3	236	64
15	532	138	134	33	0	0	10	3	676	174
16	271	127	103	46	0	0	2	0	376	173
17	94	11	38	12	0	0	8	1	140	24
18	8	1	9	2	0	0	8	5	25	8
19	164	18	44	15	0	0	7	3	215	36
20	197	17	79	6	0	0	6	4	282	27
22	321	31	134	20	0	0	10	0	465	51
23	105	14	62	8	0	0	3	0	170	22
24	64	6	47	9	0	0	10	1	121	16
25	105	2	39	2	0	0	14	2	158	6
26	122	2	46	2	1	0	16	1	185	5
27	143	8	52	1	0	0	8	0	203	9
30	164	17	57	1	0	0	2	0	223	18
31	34	3	9	1	0	0	23	0	66	4
<u>August</u>										
1	54	5	16	2	0	0	7	1	77	8
2	36	3	14	0	0	0	5	0	55	3
3	60	4	50	3	0	0	3	0	113	7
7	132	7	90	5	0	0	5	1	227	13
8	11	0	5	0	0	0	0	0	16	0
10	29	0	20	0	0	0	4	0	53	0
13	47	4	34	1	0	0	4	0	85	5
14	23	2	29	1	1	0	5	0	58	3
15	27	3	41	2	0	0	12	0	80	5
16	27	7	23	3	0	0	0	0	50	10
17	27	2	25	2	0	0	6	0	58	4
20	87	27	84	12	0	0	8	1	179	40
21	12	4	12	5	0	0	4	0	28	9
22	8	5	23	2	0	0	3	0	34	7
23	29	5	22	6	0	0	2	0	53	11
24	18	11	12	1	0	0	3	1	33	13
27	74	26	30	5	0	0	18	1	122	32
28	15	8	18	3	1	0	17	0	51	11
29	13	5	15	2	0	0	4	0	32	7
30	23	4	10	0	0	0	6	0	39	4
31	14	2	11	0	0	0	11	0	36	2

TABLE A-3. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>September</u>										
4	45	22	28	8	0	0	23	6	96	36
5	15	9	13	4	0	0	22	1	50	14
6	9	2	7	0	0	0	7	4	23	6
7	13	9	13	0	0	0	15	1	41	10
10	55	26	69	15	0	0	12	6	136	47
11	14	1	5	4	0	0	24	5	43	10
12	53	15	21	4	0	0	7	1	81	20
13	19	6	11	0	0	0	17	3	47	9
14	24	7	21	2	0	0	8	1	53	10
17	112	19	40	3	0	0	14	5	166	27
18	27	7	21	3	0	0	13	1	61	11
19	18	4	8	1	1	0	20	5	47	10
20	26	3	8	2	1	0	12	2	47	7
21	61	12	23	4	0	0	12	2	96	18
24	130	33	53	11	0	0	42	2	225	46
25	24	4	12	1	0	0	18	3	54	8
26	15	3	13	3	0	0	13	8	41	14
27	18	3	8	1	0	0	12	3	38	7
28	13	5	6	0	0	0	7	1	26	6
<u>October</u>										
1	65	24	39	8	0	0	18	8	122	40
2	8	2	16	3	1	0	6	2	31	7
4	34	9	24	2	0	0	12	2	70	13
5	13	3	12	1	0	0	5	0	30	4
9	37	7	24	2	0	0	15	3	76	12
11	11	1	7	1	0	0	8	2	26	4
15	20	4	9	1	0	0	18	6	47	11
17	9	2	3	0	0	0	24	2	36	4
19	4	0	1	1	1	0	11	3	17	4
23	5	1	4	1	0	0	16	2	25	4
24	1	2	2	0	0	0	7	1	10	3
29	1	1	0	1	0	0	11	0	12	2
31	0	2	0	1	0	0	4	0	4	3
<u>Totals</u>	6,226	1,992	2,722	747	8	1	799	145	9,755	2,885

TABLE A-4. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1980.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u>										
12	0	1	0	0	0	0	0	0	0	1
16	0	1	0	0	0	0	0	0	0	1
20	0	3	0	0	0	0	0	0	0	3
26	0	1	0	0	0	0	0	0	0	1
27	0	1	0	0	0	0	0	0	0	1
<u>June</u>										
2	3	94	0	16	0	0	0	0	3	110
9	0	9	1	1	0	0	0	2	1	12
12	0	2	0	0	0	0	0	2	0	4
13	0	1	0	1	0	0	0	4	0	6
16	0	68	2	5	0	0	0	0	2	73
17	0	4	0	0	0	0	0	4	0	8
18	0	1	0	0	0	0	0	1	0	2
20	1	30	0	3	0	0	0	1	1	34
23	7	116	5	9	0	0	0	0	12	125
24	4	45	2	4	0	0	1	1	7	50
25	3	62	5	9	0	0	0	0	8	71
26	8	102	11	19	0	0	0	2	19	123
27	18	419	35	87	0	0	0	2	53	508
28	6	23	11	21	0	1	3	2	20	47
29	28	196	22	54	0	0	0	0	50	250
30	52	432	57	106	0	0	5	1	114	539
<u>July</u>										
1	23	114	18	34	0	0	1	0	42	148
2	29	239	35	69	0	0	0	0	64	308
3	21	146	26	36	0	0	0	0	47	182
4	36	154	35	55	0	0	6	1	77	210
5	47	153	34	44	0	0	10	5	91	202
6	133	630	89	120	0	0	7	0	229	750
7	83	525	78	82	0	0	8	1	169	608
8	33	73	33	24	0	0	13	1	79	98
9	91	258	66	59	1	0	17	6	175	323
10	36	136	42	35	0	0	28	3	106	174
11	115	163	67	44	0	0	13	1	195	208
12	255	228	170	65	0	0	16	0	441	293
13	213	210	143	64	0	0	17	1	373	275
14	146	249	111	53	0	0	6	1	263	303
15	9	11	25	9	0	0	16	3	50	23
16	23	30	26	10	0	0	19	0	68	40
17	109	63	88	19	0	0	26	1	223	83
18	138	51	70	9	0	0	18	3	226	63
19	167	82	118	23	1	0	25	1	311	106
20	269	171	172	55	0	0	10	1	451	227
21	194	133	189	37	0	0	27	2	410	172
22	104	67	94	24	0	0	32	1	230	92
23	282	111	166	33	0	0	24	4	472	148
24	241	60	228	26	0	0	44	1	513	87
25	329	172	202	26	0	0	40	1	571	199
26	165	68	163	23	0	0	48	1	376	92
27	161	45	158	17	0	0	57	5	376	67
28	389	91	356	45	0	0	68	3	813	139
29	103	44	80	10	0	0	51	4	234	58
30	150	49	124	15	0	0	44	5	318	69
31	112	29	155	15	1	0	29	5	297	49
<u>August</u>										
1	103	35	74	17	0	0	34	0	211	52
2	201	48	153	29	0	0	36	2	390	79
3	69	20	40	11	0	0	41	1	150	32
4	254	72	199	21	1	0	33	0	487	93
5	113	28	75	9	0	0	24	1	212	38
6	15	4	29	1	0	0	37	1	81	6

TABLE A-4. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>August</u>										
7	36	19	50	5	0	0	53	5	139	29
8	93	18	110	6	0	0	29	1	232	25
9	0	0	0	0	1	0	84	2	85	2
10	195	34	210	15	0	0	50	0	455	49
11	58	7	71	7	0	0	22	0	151	14
12	128	25	130	10	0	0	26	0	284	35
13	23	5	57	3	0	0	35	2	115	10
14	60	17	69	8	0	0	49	5	178	30
15	90	23	87	9	0	0	29	0	206	32
18	98	61	171	16	1	0	55	2	325	79
19	43	19	46	3	0	0	24	2	113	24
20	71	61	107	17	0	0	29	2	207	80
21	35	19	62	2	0	0	25	4	122	25
22	39	22	62	7	0	0	41	0	142	29
25	110	79	189	12	1	0	60	5	360	96
26	38	25	52	7	1	1	40	3	131	36
27	15	3	31	3	0	0	32	8	78	14
28	28	16	60	7	0	0	28	1	116	24
29	17	6	32	2	0	0	31	0	80	8
<u>September</u>										
2	31	30	58	6	1	0	86	3	176	39
3	8	6	18	3	0	0	53	8	79	17
4	4	0	8	1	0	0	46	3	58	4
5	2	5	13	0	1	0	31	0	47	5
8	22	11	27	2	0	0	79	5	128	18
9	0	0	0	0	0	0	18	0	18	0
10	11	12	31	6	0	0	13	0	55	18
11	9	11	13	5	0	0	26	7	48	23
12	13	18	30	3	0	0	22	5	65	26
15	27	74	48	20	1	0	36	2	112	96
16	14	41	22	11	0	0	30	4	66	56
17	34	96	35	10	0	0	14	3	83	109
18	24	43	19	8	0	0	20	2	63	53
19	48	78	26	10	0	0	0	0	74	88
22	93	115	81	26	0	0	52	8	226	149
23	72	94	72	11	0	0	21	3	165	108
24	46	59	65	15	0	0	30	3	141	77
25	72	69	59	17	0	0	32	8	163	94
26	62	46	49	15	0	0	26	6	137	67
29	97	116	77	33	0	0	88	24	262	173
30	8	17	8	1	0	0	26	3	42	21
<u>October</u>										
1	92	61	57	13	0	0	29	5	178	79
2	51	40	21	2	0	0	34	6	106	48
3	54	44	31	8	0	0	35	7	120	59
6	98	55	24	0	2	1	74	12	198	68
7	44	15	16	3	0	0	17	2	77	20
8	41	21	12	4	0	0	21	0	74	25
9	19	10	12	1	1	0	28	1	60	12
10	22	13	24	3	0	0	26	1	72	17
14	82	51	20	2	0	1	116	15	218	69
15	11	5	10	0	0	0	15	2	36	7
16	6	11	7	2	0	0	25	0	38	13
17	8	5	3	0	0	0	8	1	19	6
20	17	11	6	2	0	1	51	8	74	22
21	5	6	2	2	0	0	13	1	20	9
23	8	16	3	2	0	0	12	0	23	18
24	8	7	0	2	0	0	5	1	13	10
27	5	7	1	1	0	0	138	13	144	21
28	5	1	1	0	0	0	0	0	6	1
<u>Totals</u>	7,541	8,152	6,687	1,992	14	5	3,072	302	17,314	10,451

TABLE A-5. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1981.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u>										
14	0	1	0	0	0	0	0	0	0	1
19	0	1	0	0	0	0	0	0	0	1
20	0	2	0	0	0	0	0	0	0	2
29	0	1	0	0	0	0	0	0	0	1
30	0	9	0	0	0	0	0	0	0	9
31	0	5	0	1	0	0	0	0	0	6
<u>June</u>										
2	0	2	0	0	0	0	0	0	0	2
9	0	17	0	5	0	0	0	6	0	28
10	0	6	0	0	0	0	0	2	0	8
12	0	10	0	7	0	0	0	8	0	25
15	1	12	0	4	0	0	0	1	1	17
17	2	16	0	6	0	0	0	0	2	22
19	0	15	0	10	0	1	0	7	0	33
22	3	102	0	43	0	0	0	6	3	151
23	2	39	0	4	0	0	0	1	2	44
24	0	6	1	3	0	0	0	0	1	9
25	2	19	3	3	0	0	0	1	5	23
29	16	104	8	56	0	0	0	3	24	163
30	2	11	5	7	0	0	0	1	7	19
<u>July</u>										
2	76	340	64	156	0	0	0	0	140	496
3	14	31	8	11	0	0	4	2	26	44
5	194	258	138	110	0	0	0	0	332	368
6	125	118	75	49	0	0	6	3	206	170
7	26	40	22	10	0	0	1	1	49	51
8	149	102	53	34	0	0	8	2	210	138
10	351	147	186	71	0	0	4	2	541	220
11	178	69	94	26	1	0	6	1	279	96
13	236	88	125	28	0	0	24	4	385	120
14	122	33	74	10	0	0	16	1	212	44
15	119	30	73	19	0	0	6	1	198	50
16	73	18	54	7	0	0	6	3	133	28
17	162	34	88	9	0	0	9	2	259	45
20	510	68	315	32	0	0	0	0	825	100
21	164	26	80	15	0	0	26	2	270	43
22	80	22	105	12	0	0	22	2	207	36
23	163	19	111	12	0	0	9	3	283	34
24	113	14	70	9	0	0	26	5	209	28
27	338	46	211	21	1	0	23	1	573	68
28	42	5	29	2	0	0	14	0	85	7
29	36	5	38	6	0	0	7	0	81	11
30	44	8	26	4	1	0	12	0	83	12
31	36	4	12	3	0	0	10	2	58	9
<u>August</u>										
4	223	30	121	14	0	0	23	1	367	45
5	61	5	24	1	0	0	6	1	91	7
6	17	3	14	2	1	0	6	1	38	6
10	26	12	12	2	0	0	17	0	55	14
11	8	6	3	1	0	0	2	0	13	7
14	30	26	17	2	0	0	15	5	62	33
17	32	52	13	6	0	0	10	0	55	58
18	25	32	2	5	0	0	9	1	36	38
19	4	4	0	1	0	0	12	0	16	5
24	47	51	21	20	0	0	16	6	84	77
25	15	17	3	1	0	0	2	0	20	18
26	11	30	9	6	0	0	5	0	25	36
28	22	22	8	7	1	0	14	2	45	31
31	44	30	22	9	0	0	34	2	100	41



TABLE A-5. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>September</u>										
2	44	26	20	11	0	0	24	2	88	39
6	14	7	9	4	0	0	40	4	63	15
8	66	19	46	9	0	1	25	2	137	31
9	20	5	19	3	1	0	10	0	50	8
10	11	3	10	1	0	0	8	2	29	6
14	40	12	55	9	1	0	32	5	128	26
15	15	8	22	6	0	0	1	0	38	14
16	21	10	19	0	1	0	7	0	48	10
18	26	7	23	4	1	0	12	1	62	12
21	31	14	20	4	0	0	7	0	58	18
23	24	7	18	3	0	0	6	1	48	11
24	15	4	12	0	0	0	8	0	35	4
25	11	6	11	1	0	0	16	1	38	8
28	76	16	46	3	0	0	45	1	167	20
29	20	10	5	2	0	0	35	1	60	13
<u>October</u>										
1	54	17	35	8	1	0	18	3	108	28
7	81	27	61	10	0	0	40	2	182	39
13	24	10	17	0	0	0	93	4	134	14
15	6	3	20	0	0	0	10	0	36	3
20	11	5	48	3	0	0	20	1	79	9
27	5	0	8	0	2	0	54	4	69	4
<u>Totals</u>	4,559	2,439	2,861	963	12	2	921	126	8,353	3,530

TABLE A-6. Mactaquac daily counts of wild and hatchery 1-SW (grilse) and M-SW (salmon) fish, 1982.

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>May</u>										
23	0	0	0	1	0	0	0	0	0	1
27	0	1	0	0	0	0	0	0	0	1
29	0	2	0	1	0	0	0	0	0	3
30	0	0	0	1	0	0	0	0	0	1
<u>June</u>										
1	0	1	0	0	0	0	0	0	0	1
4	0	2	0	0	0	0	0	0	0	2
5	0	3	0	1	0	0	0	0	0	4
6	0	4	0	4	0	0	0	0	0	8
7	0	6	0	2	0	0	0	0	0	8
8	0	3	0	0	0	0	0	0	0	3
11	0	6	0	2	0	0	0	2	0	10
14	0	39	0	8	0	1	0	4	0	52
15	0	4	0	0	0	0	0	2	0	6
17	0	25	0	6	0	0	0	5	0	36
21	4	100	0	34	0	0	0	2	4	136
22	2	28	0	10	0	0	0	4	2	42
24	3	20	1	12	0	0	0	10	4	42
25	1	10	0	5	0	0	0	0	1	15
28	19	144	3	46	0	0	0	6	22	196
29	20	118	3	47	0	0	0	1	23	166
30	17	97	3	34	0	0	0	4	20	135
<u>July</u>										
1	7	18	3	11	0	0	2	1	12	30
2	23	62	3	12	0	0	1	0	27	74
5	87	170	10	33	0	0	0	1	97	204
6	34	53	7	12	0	0	0	0	41	65
7	99	139	15	43	0	0	4	1	118	183
8	185	112	18	37	0	0	0	0	203	149
9	66	48	23	10	0	0	6	3	95	61
10	221	85	36	17	0	0	0	0	257	102
12	343	215	80	62	0	0	0	0	423	277
13	112	55	39	17	0	0	2	0	153	72
14	113	51	22	15	0	0	10	0	145	66
15	63	16	15	7	0	0	4	0	82	23
16	111	30	18	4	0	0	2	0	131	34
19	366	96	111	23	0	0	5	0	482	119
20	62	13	15	4	0	0	6	2	83	19
22	75	18	32	10	0	0	6	1	113	29
26	232	18	95	5	0	0	14	2	341	25
27	81	6	36	1	0	0	4	0	121	7
28	112	14	62	5	0	0	6	0	180	19
29	143	6	72	3	0	0	6	0	221	9
30	99	18	37	4	0	0	7	0	143	22
<u>August</u>										
3	204	22	148	4	1	0	120	0	473	26
4	82	5	45	2	0	0	9	0	136	7
5	44	5	16	1	0	0	4	0	64	6
6	46	4	33	4	0	0	6	0	85	8
9	99	24	48	3	0	0	26	2	173	29
10	27	7	25	2	0	0	15	1	67	10
12	60	16	32	1	0	0	13	0	105	17
13	3	1	8	1	0	0	15	1	26	3
16	46	14	39	4	0	0	33	0	118	18
18	20	9	35	1	0	0	16	0	71	10
23	33	14	30	3	0	0	36	0	99	17
25	9	10	10	4	0	0	13	1	32	15
26	3	7	7	2	0	0	33	5	43	14
30	45	49	24	7	2	0	92	5	163	61
31	4	14	11	4	1	1	8	2	24	21

TABLE A-6. Continued

Date	From Mactaquac Dam collection facilities				From Mactaquac Hatchery migration channel				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW	1-SW	M-SW		
<u>September</u>										
3	30	31	14	8	2	0	30	2	76	41
7	67	39	26	9	0	0	57	1	150	49
8	15	10	3	3	0	0	6	0	24	13
10	29	8	14	1	0	0	12	0	55	9
13	56	20	9	5	0	0	8	0	73	25
15	44	18	22	2	0	0	22	0	88	20
17	28	9	8	2	0	0	28	1	64	12
21	76	14	20	7	0	0	20	1	116	22
22	23	9	16	1	0	0	3	0	42	10
27	47	10	27	3	1	0	21	0	96	13
29	13	2	9	2	0	0	6	0	28	4
<u>October</u>										
6	38	8	9	1	0	0	29	3	76	12
12	19	5	9	4	1	0	15	2	44	11
18	6	4	3	0	0	0	26	6	35	10
21	3	3	3	0	0	0	14	4	20	7
22	0	1	1	0	0	0	2	0	3	1
28	4	4	1	0	0	0	5	0	10	4
<u>Totals</u>	3,923	2,252	1,464	640	8	2	828	88	6,223	2,982



## APPENDIX B

DAILY DISTRIBUTION OF ATLANTIC SALMON  
TO THE WOODSTOCK RELEASE SITE, 1977-82

Numbers include 1-SW (grilse) and M-SW (salmon) fish, of wild and hatchery origin, sorted by sex, taken at both the Mactaquac Dam collection facilities and the Mactaquac Hatchery migration channel. They were trucked from the sorting facilities at Mactaquac Hatchery and released just above the town of Woodstock, near the upper end of the Mactaquac Headpond.

TABLE B-1. Daily distribution of Atlantic salmon to the Woodstock release site, 1977.

Date	I-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
3	0	0	2	0	1	0	8	1	2	10
10	1	0	0	0	0	2	2	1	1	5
17	0	0	0	0	3	2	8	7	0	20
<u>July</u>										
7	21	0	50	2	16	76	6	23	73	121
8	6	0	21	0	2	24	2	9	27	37
10	98	1	75	0	35	230	10	61	174	336
11	167	0	191	0	27	206	5	54	358	292
12	21	0	30	0	8	33	2	6	51	49
13	69	0	69	0	32	221	13	47	138	313
14	122	0	213	0	21	177	13	54	335	265
17	105	0	137	0	16	180	10	52	242	258
18	136	0	150	0	10	155	10	39	286	214
19	32	0	94	0	0	1	0	0	126	1
23	75	0	185	0	8	115	4	38	260	165
24	114	0	197	0	17	219	6	47	311	289
25	31	0	48	0	7	98	4	12	79	121
28	36	0	94	0	7	85	8	17	130	117
30	25	0	93	1	6	64	5	22	119	97
<u>August</u>										
8	53	0	153	2	12	120	4	24	208	160
15	47	1	77	6	8	125	2	20	131	155
19	25	0	103	8	3	62	1	17	136	83
24	51	3	104	9	21	138	6	24	167	189
30	36	6	148	5	11	100	11	27	195	149
<u>September</u>										
6	51	3	106	11	7	105	2	16	171	130
16	25	1	49	2	8	84	3	16	77	111
19	68	7	62	9	11	78	1	6	146	96
29	34	2	107	6	1	12	0	1	149	14
<u>October</u>										
4	27	0	75	7	0	0	3	11	109	14
<u>November</u>										
1	8	1	159	23	1	13	3	17	191	34
<u>Totals</u>	1,484	25	2,792	91	299	2,725	152	669	4,392	3,845

TABLE B-2. Daily distribution of Atlantic salmon to the Woodstock release site, 1978.

Date	I-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
15	0	0	0	0	4	2	5	18	0	29
29	8	0	11	0	9	55	6	34	19	104
<u>July</u>										
3	20	0	19	0	4	40	8	32	39	84
4	13	0	7	0	10	64	5	27	20	106
7	38	0	25	2	11	78	12	44	65	145
8	43	0	20	1	4	34	5	17	64	60
10	1	0	26	3	3	69	3	35	30	110
11	25	0	32	1	5	23	3	32	58	63
13	38	0	35	2	10	90	7	45	75	152
17	107	1	93	1	15	108	12	86	202	221
20	36	0	56	0	1	27	2	20	92	50
22	55	0	67	0	3	40	1	24	122	68
24	22	0	55	0	4	23	2	19	77	48
<u>August</u>										
1	99	0	133	1	0	34	0	20	233	54
4	39	0	54	0	1	18	1	9	93	29
11	32	0	58	0	1	20	1	14	90	36
22	19	2	72	3	0	27	2	8	96	37
30	13	1	47	1	4	10	1	7	62	22
<u>September</u>										
8	9	0	55	6	3	48	5	12	70	68
15	13	4	97	9	10	84	22	56	123	172
29	14	3	55	5	7	59	13	29	77	108
<u>October</u>										
4	22	3	69	7	9	59	12	19	101	99
13	19	4	37	0	4	45	8	1	60	58
26	15	6	76	4	8	44	6	41	101	99
<u>Totals</u>	700	24	1,199	46	130	1,101	142	649	1,969	2,022

TABLE B-3. Daily distribution of Atlantic salmon to the Woodstock release site, 1979.

Date	l-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		l-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
20	0	0	0	0	1	2	0	0	0	3
26	0	0	1	0	4	20	3	5	1	32
<u>July</u>										
1	27	1	6	0	5	57	7	22	34	91
2	52	0	4	0	3	54	6	13	56	76
3	57	2	13	2	6	93	2	25	74	126
6	22	0	29	0	1	24	1	7	51	33
9	285	1	94	1	8	118	8	42	381	176
9	84	0	37	0	3	37	3	11	121	54
11	90	0	36	2	0	0	0	0	128	0
12	368	4	99	0	0	0	0	0	471	0
16	515	0	120	0	14	120	8	19	635	161
16	141	0	37	0	0	0	0	0	178	0
22	261	0	114	0	0	18	0	12	375	30
27	299	0	139	0	0	7	0	9	438	16
29	1	0	1	0	0	1	0	0	2	1
<u>August</u>										
3	144	1	108	1	3	9	0	3	254	15
14	84	2	77	0	1	3	0	2	163	6
17	52	29	92	18	2	10	0	3	191	15
31	35	1	35	2	0	5	0	0	73	5
<u>September</u>										
6	65	4	92	8	5	28	5	16	169	54
18	167	15	143	9	5	28	4	11	334	48
25	195	3	187	3	0	11	7	3	388	21
<u>October</u>										
1	73	1	96	1	0	6	3	5	171	14
9	66	0	94	0	0	0	0	0	160	0
12	1	0	1	0	0	1	0	0	2	1
17	32	4	59	4	0	6	5	4	99	15
19	82	18	77	10	0	0	0	0	187	0
29	9	2	38	3	0	3	3	5	52	11
<u>November</u>										
5	1	0	14	1	19	22	45	35	16	121
<u>Totals</u>	3,208	88	1,843	65	80	683	110	252	5,204	1,125



TABLE B-4. Daily distribution of Atlantic salmon to the Woodstock release site, 1980.

Date	I-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>May</u>										
15	0	0	0	0	0	1	0	0	0	1
26	0	0	0	0	3	2	0	0	0	5
30	0	0	0	0	1	0	0	0	0	1
<u>June</u>										
16	0	0	2	0	45	27	3	10	2	85
20	1	0	0	0	11	21	6	3	1	41
25	7	0	8	0	14	86	3	11	15	114
27	1	0	5	0	10	66	0	17	6	93
28	11	1	20	1	29	194	5	43	33	271
30	20	0	20	1	8	142	4	25	41	179
<u>July</u>										
1	23	0	24	0	18	160	9	38	47	225
3	21	0	27	0	12	147	10	24	48	193
5	33	0	38	0	15	139	6	35	71	195
6	87	0	58	0	23	305	3	56	145	387
7	52	0	38	2	36	320	9	39	92	404
11	81	3	105	2	0	0	0	0	191	0
12	83	3	66	2	2	12	0	5	154	19
13	236	3	167	5	0	1	0	0	411	1
14	46	0	41	1	6	43	0	10	88	59
16	25	0	71	1	4	34	2	15	97	55
17	59	0	49	0	3	32	1	5	108	41
20	165	3	142	1	14	68	2	8	311	92
21	67	0	51	1	12	31	2	1	119	46
22	81	1	57	3	7	41	0	3	142	51
23	188	4	203	7	13	77	4	8	402	102
25	77	2	111	4	2	13	0	2	194	17
26	382	7	290	17	23	197	0	28	696	248
28	101	2	93	5	2	21	1	2	207	26
29	98	1	100	1	2	25	0	15	200	42
31	128	0	91	1	0	0	0	0	220	0
<u>August</u>										
4	266	4	224	9	0	1	0	0	503	1
5	110	3	97	2	0	4	0	4	212	8
8	108	11	243	30	1	17	0	7	392	25
11	97	2	74	7	1	8	1	10	180	20
13	157	16	274	26	2	32	8	10	473	52
18	92	7	202	24	2	59	2	16	325	79
22	69	5	173	17	0	41	7	6	264	54
29	91	7	269	36	9	41	2	28	403	80
<u>September</u>										
13	41	12	218	32	4	40	4	20	303	68
23	141	13	168	18	9	85	4	11	340	109
25	45	8	66	8	8	38	4	17	127	67
29	113	20	191	26	14	93	0	0	350	107
<u>October</u>										
2	51	7	62	6	11	63	0	0	126	74
10	131	20	78	10	4	55	0	0	239	59
24	37	9	93	10	5	39	0	8	149	52
27	64	13	154	39	7	11	3	15	270	36
<u>Totals</u>	3,686	187	4,463	355	392	2,832	105	555	8,691	3,884

TABLE B-5. Daily distribution of Atlantic salmon to the Woodstock release site, 1981.

Date	l-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		l-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>May</u>										
22	0	0	0	0	1	2	0	0	0	3
<u>June</u>										
10	0	0	0	0	8	15	1	12	0	36
25	3	1	4	0	4	50	2	8	8	64
<u>July</u>										
2	42	0	42	2	4	111	4	57	86	176
3	20	0	6	0	4	50	4	16	26	74
5	66	1	59	0	4	86	1	42	126	133
6	32	0	20	1	3	43	1	12	53	59
8	108	1	66	0	0	0	0	0	175	0
10	231	0	134	1	4	78	8	35	366	125
11	68	0	49	0	1	19	1	9	117	30
15	172	0	118	1	0	0	0	0	291	0
18	209	1	135	3	0	1	0	0	348	1
20	82	1	50	2	1	14	0	3	135	18
21	104	0	71	0	0	0	0	0	175	0
22	74	0	123	0	0	0	0	0	197	0
24	67	0	62	2	1	7	0	9	131	17
25	1	0	1	0	0	1	0	0	2	1
27	238	1	138	1	1	16	0	3	378	20
30	81	0	81	2	1	12	1	8	164	22
<u>August</u>										
5	90	2	48	0	1	8	0	2	140	11
10	41	4	55	0	2	13	1	1	100	17
14	37	1	36	1	3	29	1	5	75	38
28	23	0	19	3	6	16	3	5	45	30
<u>September</u>										
2	69	19	87	12	8	48	1	13	187	70
16	68	11	122	14	4	16	6	5	215	31
24	87	10	99	7	2	22	2	3	203	29
30	104	3	142	16	2	27	0	5	265	34
<u>October</u>										
7	45	6	68	6	0	13	1	6	125	20
16	2	0	0	0	0	0	0	0	2	0
20	31	3	96	2	0	15	0	4	132	19
<u>November</u>										
5	11	3	75	16	0	2	1	3	105	6
<u>Totals</u>	2,206	68	2,006	92	65	714	39	266	4,372	1,084

TABLE B-6. Daily distribution of Atlantic salmon to the Woodstock release site, 1982.

Date	I-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
21	1	0	0	0	0	43	2	15	1	60
28	6	0	1	0	0	41	0	4	7	45
29	5	0	1	0	0	37	0	8	6	45
<u>July</u>										
5	19	0	4	0	3	51	0	7	23	61
7	33	1	6	0	4	47	0	5	40	56
8	140	4	24	0	3	35	0	2	168	40
9	55	0	26	0	1	37	1	4	81	43
12	239	1	60	0	0	48	0	2	300	50
15	152	6	42	0	0	0	0	0	200	0
16	102	0	26	0	2	13	0	5	128	20
19	91	2	24	1	0	15	0	0	118	15
20	109	2	39	0	2	20	0	2	150	24
26	230	2	3	0	0	18	0	7	235	25
30	426	9	214	5	2	41	0	7	654	50
<u>August</u>										
9	2	0	0	0	0	0	0	0	2	0
16	47	2	81	3	1	14	0	1	133	16
23	47	6	95	7	7	16	0	2	155	25
27	11	0	53	9	0	0	0	0	73	0
<u>September</u>										
3	31	6	53	6	7	38	1	8	96	54
8	50	17	69	14	0	0	0	0	150	0
21	57	15	70	10	0	0	0	0	152	0
27	36	12	44	4	1	7	0	0	96	8
<u>October</u>										
12	39	11	43	10	0	9	0	1	103	10
22	18	11	65	8	1	12	1	3	102	17
<u>Totals</u>	1,946	107	1,043	77	34	542	5	83	3,173	664



## APPENDIX C

DAILY DISTRIBUTION OF ATLANTIC SALMON  
TO THE TOBIQUE RIVER RELEASE SITE, 1977-82

Numbers include 1-SW (grilse) and M-SW (salmon) fish, of wild and hatchery origin, sorted by sex, and trucked directly from the secondary sorting facilities at Mactaquac to the Tobique release site. This site is located on the north side of the river near the upper end of the Tobique Narrows headpond, about 5 km below the highway bridge at Arthurette.

TABLE C-1. Daily distribution of Atlantic salmon to the Tobique River release site, 1977.

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
24	0	0	0	0	10	12	0	3	0	25
30	1	0	0	0	5	14	2	0	1	21
<u>July</u>										
5	8	0	8	3	19	83	3	12	19	117
8	27	0	83	1	17	142	9	46	111	214
9	70	0	63	1	29	194	6	37	134	266
11	87	0	116	0	27	151	13	56	203	247
12	111	0	104	0	15	167	3	50	215	235
13	84	0	113	0	32	160	5	57	197	254
14	116	0	99	0	21	144	15	56	215	236
15	123	0	173	0	10	110	5	29	296	154
16	85	0	181	0	22	136	3	23	266	184
17	116	0	144	0	11	161	6	37	260	215
18	91	0	163	0	7	144	6	39	254	196
19	110	0	169	0	9	129	4	29	279	171
20	53	0	136	0	7	171	10	40	189	228
21	93	0	175	0	7	166	2	32	268	207
22	115	0	139	0	8	158	5	25	254	196
25	58	0	74	0	19	220	8	21	132	268
26	71	0	64	0	21	187	5	27	135	240
27	51	0	146	0	3	104	3	24	197	134
<u>August</u>										
3	86	2	156	1	8	155	9	31	245	202
4	62	1	158	3	8	146	7	42	224	203
12	81	1	160	13	8	122	3	18	255	151
<u>September</u>										
14	42	5	160	23	11	116	3	16	230	146
<u>November</u>										
3	0	0	0	0	40	11	24	20	0	95
<u>Totals</u>	1,741	9	2,784	45	374	3,303	159	770	4,579	4,606

TABLE C-2. Daily distribution of Atlantic salmon to the Tobique River release site, 1978.

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
21	1	0	1	0	8	21	7	12	2	48
27	15	0	13	0	18	57	8	40	28	123
<u>July</u>										
4	34	0	13	0	17	162	10	61	47	250
5	10	0	9	0	6	104	10	64	19	184
9	46	0	57	0	15	134	13	69	103	231
11	67	0	45	0	11	115	13	59	112	198
16	100	2	85	1	3	93	4	70	188	170
19	51	0	73	0	5	73	4	44	124	126
21	92	1	120	0	8	92	9	62	213	171
26	93	0	156	0	6	58	7	48	249	119
<u>August</u>										
9	62	1	62	1	1	29	1	20	126	51
16	45	2	90	2	4	29	5	13	139	51

TABLE C-2. Daily distribution of Atlantic salmon to the Tobique River release site, 1978.  
(continued)

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>September</u>										
6	11	3	95	12	3	37	2	15	121	57
13	25	0	87	10	6	84	12	56	122	158
19	37	4	88	0	13	103	18	59	129	193
26	11	2	71	7	18	99	8	35	91	160
<u>October</u>										
11	35	6	51	0	11	77	4	7	92	99
18	33	4	83	2	10	61	11	29	122	111
<u>November</u>										
2	2	0	8	0	25	8	34	39	10	106
<u>Totals</u>	770	25	1,207	35	188	1,436	180	802	2,037	2,606

TABLE C-3. Daily distribution of Atlantic salmon to the Tobique River release site, 1979.

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
25	4	0	0	0	9	33	6	9	4	57
<u>July</u>										
2	86	1	37	0	20	121	17	48	124	206
3	15	0	13	1	1	41	0	9	29	51
4	68	0	29	1	9	102	8	43	98	162
8	191	0	54	0	2	50	4	15	245	71
10	266	0	82	0	12	109	2	15	348	138
11	213	1	46	0	7	67	2	14	260	90
13	148	2	55	0	6	75	2	33	205	116
15	200	1	96	2	3	44	3	19	299	69
17	124	1	48	0	11	116	7	27	173	161
20	216	0	90	0	3	18	2	21	306	44
21	234	0	80	0	0	24	3	9	314	36
25	199	0	114	0	1	30	3	14	313	48
31	278	6	87	0	4	23	0	3	371	30
<u>August</u>										
8	133	9	94	4	1	6	0	3	240	10
23	134	15	154	15	0	43	0	26	318	69
29	110	10	111	4	4	46	0	7	235	57
<u>September</u>										
12	112	24	151	9	4	32	9	18	296	63
<u>Totals</u>	2,731	70	1,341	36	97	980	68	333	4,178	1,478

TABLE C-4. Daily distribution of Atlantic salmon to the Tobique River release site, 1980.

Date	I-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
3	2	1	0	0	20	71	2	13	3	106
23	7	0	4	0	24	86	1	7	11	118
27	13	1	30	1	24	189	7	35	45	255
30	58	0	52	4	51	363	29	83	114	526
<u>July</u>										
2	22	1	26	1	25	189	8	48	50	270
5	44	0	41	1	9	144	8	32	86	193
7	44	0	54	5	38	263	9	38	103	348
8	46	2	41	4	28	190	10	31	93	259
9	63	3	80	1	19	153	6	39	147	217
10	25	4	15	1	24	195	7	34	45	260
12	85	1	46	1	14	182	5	37	133	238
13	63	0	54	4	29	186	8	36	121	259
14	60	0	37	1	20	198	5	46	98	269
15	84	3	71	2	25	158	4	32	160	219
19	186	1	151	1	8	71	4	19	339	102
21	201	3	126	2	18	105	3	12	332	138
22	145	3	178	4	13	98	3	6	330	120
24	208	7	122	10	13	65	1	2	347	81
25	192	2	220	6	7	46	1	7	420	61
28	158	0	275	5	3	42	1	17	438	63
29	225	2	176	4	9	46	4	14	407	73
31	126	1	227	8	14	71	10	23	362	118
<u>August</u>										
1	164	2	215	13	6	52	9	23	394	90
5	104	2	114	4	19	120	15	49	224	203
7	173	1	183	3	4	43	3	15	360	65
11	125	8	280	24	2	26	3	7	437	38
15	149	1	229	5	1	39	6	16	384	62
21	98	16	183	23	9	71	6	18	320	104
26	104	7	229	20	4	75	7	10	360	96
<u>September</u>										
5	36	7	263	30	5	34	7	17	336	63
18	34	10	134	17	2	113	5	19	195	139
26	83	13	145	6	32	93	10	18	247	153
<u>October</u>										
3	108	11	113	17	11	86	0	0	249	97
7	131	23	145	15	16	84	0	4	314	104
17	81	18	156	31	11	57	1	3	286	72
<u>November</u>										
4	0	0	0	0	11	6	27	27	0	71
<u>Totals</u>	3,447	154	4,415	274	568	4,010	235	837	8,290	5,650



TABLE C-5. Daily distribution of Atlantic salmon to the Tobique River release site, 1981.

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
3	0	0	0	0	7	11	0	1	0	19
16	1	0	0	0	5	15	6	12	1	38
23	4	1	0	0	17	102	11	52	5	182
30	16	0	5	3	10	84	6	45	24	145
<u>July</u>										
3	24	0	17	2	7	168	8	73	43	256
6	99	2	69	0	7	125	7	44	170	183
7	125	0	79	2	4	109	8	37	206	158
9	66	0	18	0	10	127	7	36	84	180
11	169	1	68	0	2	93	2	21	238	118
13	191	0	93	2	4	65	1	15	286	85
14	173	0	140	2	2	58	3	19	315	82
17	0	0	0	0	6	52	2	26	0	86
20	223	0	161	5	6	48	1	3	389	58
21	288	0	133	2	3	34	0	8	423	45
24	191	0	148	2	7	58	4	25	341	94
28	164	2	147	2	5	29	1	10	315	45
<u>August</u>										
5	225	2	136	6	7	23	1	7	369	38
19	58	3	39	7	13	75	3	5	107	96
26	62	11	48	6	10	88	0	14	127	112
<u>September</u>										
10	102	9	149	17	1	24	5	15	277	45
<u>October</u>										
2	52	3	48	5	0	15	2	2	108	19
14	29	1	98	10	0	10	0	2	138	12
<u>November</u>										
4	0	0	0	0	10	4	12	11	0	37
<u>Totals</u>	2,262	35	1,596	73	143	1,417	90	483	3,966	2,133

TABLE C-6. Daily distribution of Atlantic salmon to the Tobique River release site, 1982.

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>June</u>										
9	0	0	0	0	2	12	1	9	0	24
15	0	0	0	0	0	36	0	14	0	50
22	5	0	0	0	1	88	3	31	5	123
25	3	1	1	0	0	22	1	16	5	39
28	13	0	2	0	2	79	0	16	15	97
30	24	0	4	0	2	113	3	23	28	141
<u>July</u>										
2	25	1	8	0	6	105	2	19	34	132
6	80	0	8	0	11	137	2	14	88	164
8	0	0	0	0	8	129	4	23	0	164
9	139	1	13	0	4	67	1	10	153	82
10	232	0	39	0	3	92	2	8	271	105

TABLE C-6. Daily distribution of Atlantic salmon to the Tobique River release site, 1982.  
(continued)

Date	1-SW				M-SW				Totals	
	Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
	Male	Female	Male	Female	Male	Female	Male	Female		
<u>July</u>										
13	103	0	20	0	1	162	0	20	123	183
15	112	0	40	1	4	99	2	15	153	120
20	249	2	61	2	2	83	0	7	314	92
23	74	1	34	1	3	28	0	5	110	36
27	0	0	99	1	0	0	0	0	100	0
<u>August</u>										
4	190	11	263	5	1	21	0	1	469	23
9	249	7	170	2	0	35	0	4	428	39
13	97	5	90	1	3	23	0	2	193	28
31	35	12	106	9	6	59	2	8	162	75
<u>September</u>										
14	77	24	45	7	11	46	0	2	153	59
22	73	26	51	8	8	27	4	4	158	43
<u>Totals</u>	1,780	91	1,054	37	78	1,463	27	251	2,962	1,819

## APPENDIX D

DAILY DISTRIBUTION OF ATLANTIC SALMON TO  
SAINT JOHN RIVER TRIBUTARIES, 1977-82

Distribution to Saint John River tributaries of 1-SW (grilse) and M-SW (salmon) fish, of wild and hatchery origin, sorted by sex, was conducted to maximize use of both accessible and inaccessible spawning and rearing areas. Releases were confined to the fall season, when there was both adequate water and limited exposure time to poachers.

TABLE D-1. Daily distribution of Atlantic salmon to Saint John River tributaries, 1977-82.

Year	River of release/ date	Site no. 1	1-SW				M-SW				Totals	
			Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
			Male	Female	Male	Female	Male	Female	Male	Female		
1977	<u>Becaquimec</u>											
	23 Sep	1	17	3	30	5	7	46	0	0	55	53
	28 Sep	2	9	1	10	8	5	7	0	9	28	21
	30 Sep	2	34	8	14	1	5	42	0	2	57	49
	13 Oct	1	40	1	48	7	3	33	1	8	96	45
	<u>Meduxnekeag</u>											
	27 Sep	3	7	1	13	0	0	19	0	0	21	19
	<u>Nackawic</u>											
	26 Sep	5	7	0	10	0	5	22	0	0	17	27
	19 Oct	4	10	1	46	7	1	21	3	18	64	43
	<u>Salmon (Grand Falls)</u>											
	21 Sep	6	18	3	22	3	9	37	1	7	46	54
	26 Sep	7	16	3	35	2	6	51	0	0	56	57
	3 Oct	6	8	3	42	5	2	33	5	16	58	56
	<u>Little Tobique</u>											
	11 Oct	14	11	5	25	4	3	25	3	11	45	42
	12 Oct	13	10	4	38	7	1	23	1	16	59	41
	<u>Odellach</u>											
	28 Sep	16	0	0	47	6	0	0	15	56	53	71
	<u>Serpentine</u>											
	27 Sep	18	22	2	25	3	6	48	0	0	52	54
	<u>Totals</u>		209	35	405	58	53	407	29	143	707	632
1978	<u>Odellach</u>											
	16 Oct	17	0	0	34	2	0	0	7	35	36	42
	<u>Totals</u>		0	0	34	2	0	0	7	35	36	42
1979	<u>Becaquimec</u>											
	25 Sep	1	44	19	15	3	6	34	1	9	81	50
	11 Oct	1	20	11	21	5	0	18	3	10	57	31
	<u>Shikatehawk</u>											
	2 Oct	10	26	11	16	3	1	24	6	11	56	42
	<u>Totals</u>		90	41	52	11	7	76	10	30	194	123
1980	<u>Becaquimec</u>											
	19 Sep	1	17	0	11	1	8	35	4	3	29	50
	24 Sep	1	13	0	21	0	12	42	4	9	34	67
	<u>Salmon (Grand Falls)</u>											
	17 Sep	8	11	0	19	0	4	31	3	6	30	44
	22 Sep	9	9	0	14	0	13	38	4	2	23	57
	23 Sep	8	9	0	19	0	4	37	8	3	28	52
	<u>Shikatehawk</u>											
	18 Sep	10	17	0	15	0	5	38	4	3	32	50
	<u>Totals</u>		76	0	99	1	46	221	27	26	176	320
1981	<u>Little Tobique</u>											
	3 Nov	13	0	0	1	0	10	0	14	25	1	49
	<u>Mamozekel</u>											
	3 Nov	15	0	0	0	0	5	1	5	9	0	20

TABLE D-1. Daily distribution of Atlantic salmon to Saint John River tributaries, 1977-82. (continued)

Year	River of release/ date	Site no. <sup>1</sup>	1-SW				M-SW				Totals	
			Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
			Male	Female	Male	Female	Male	Female	Male	Female		
1981	<u>Serpentine</u>											
	2 Nov	19	0	0	2	0	6	0	22	30	2	58
	<u>Totals</u>		0	0	3	0	21	1	41	64	3	127
1982	<u>Tobique at Brown Flats</u>											
	2 Nov	11	3	1	59	0	5	6	8	11	63	30
	<u>Campbell</u>											
	14 Oct	12	0	0	12	0	0	0	13	25	12	38
	22 Oct	12	0	0	7	0	0	0	18	25	7	43
	<u>Serpentine</u>											
	28 Oct	18	0	0	0	0	9	3	20	18	0	50
	29 Oct	18	0	0	0	0	8	2	17	23	0	50
	1 Nov	18	0	0	0	0	13	5	12	20	0	50
	<u>Totals</u>		3	1	78	0	35	16	88	122	82	261

1. See Table 6 for coordinates.



## APPENDIX E

DAILY DISTRIBUTION OF ATLANTIC SALMON  
FOR SPECIAL STUDIES, 1977-80

Numbers include 1-SW (grilse) and M-SW (salmon) fish of wild and hatchery origin, sorted by sex and trucked from the holding ponds of the secondary sorting facilities at Mactaquac. Release dates for these fish were not necessarily proximate to the date of first capture. All releases to the Saint John River were tagged.

Sugar Island and Springhill Brook are located about 5 km and 11 km, respectively, below Mactaquac Dam. Perth-Andover is located about 3 km below the influent of the Tobique River.

TABLE E-1. Daily distribution of Atlantic salmon for special studies, 1977-80.

River & release location	Date	1-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>1977</u>											
Saint John	12 Jul	0	0	30	0	0	0	0	0	30	0
River	23 Aug	0	0	28	2	0	0	0	0	30	0
(Sugar	20 Sep	0	0	24	6	10	20	0	0	30	30
Island	21 Sep	0	0	0	0	0	0	6	10	0	16
causeways)											
Totals released	below Mactaquac	0	0	82	8	10	20	6	10	90	46
Totals returned	to Mactaquac	0	0	60	7	6	14	3	6	67	29
<u>1978</u>											
Saint John	30 Jun	7	0	0	0	2	22	0	0	7	24
River	3 Jul	2	0	2	0	3	32	7	23	4	65
(Spring-	17 Jul	49	0	35	0	4	47	3	22	84	76
hill	20 Jul	0	0	13	2	0	0	0	2	15	2
Brook)	28 Jul	0	0	0	0	0	0	2	17	0	19
	4 Aug	0	0	0	0	0	0	0	4	0	4
	8 Aug	22	1	19	0	2	15	2	16	42	35
	10 Aug	7	0	11	0	0	13	0	2	18	15
	17 Aug	0	0	0	0	0	0	2	6	0	8
	21 Sep	5	0	22	2	5	29	4	14	29	52
	26 Sep	17	4	16	1	4	11	3	9	38	27
Totals released	below Mactaquac	109	5	118	5	20	169	23	115	237	327
Totals returned	to Mactaquac	50	3	97	3	11	82	10	89	153	192
<u>1979</u>											
Saint John River	(Perth-Andover)										
	1 Aug	4	0	171	0	0	0	0	0	175	0
<u>1980</u>											
St. Croix	7 Oct	0	0	0	0	0	0	23	57	0	80
River	8 Oct	0	0	8	1	0	0	31	38	9	69
(Canoose	9 Oct	0	0	19	1	0	0	29	39	20	68
River to	10 Oct	0	0	58	4	0	0	13	24	62	37
Vanceboro)	14 Oct	0	0	21	6	0	0	29	43	27	72
Totals		0	0	106	12	0	0	125	201	118	326



## APPENDIX F

DAILY MORTALITIES OF ATLANTIC SALMON  
COLLECTED IN THE MACTAQUAC AREA, 1977-82

Mortalities of both 1-SW (grilse) and M-SW (salmon) fish are listed according to wild or hatchery origin and sex. Those under the sub-heading "after sorting" have gone through the Mactaquac secondary facilities and are included in the daily counts. Those under "before sorting" are not included in previously tabulated daily counts through Mactaquac sorting facilities.

TABLE F-1. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1977.

Date	Mortality location	I-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>Before sorting</u>											
4 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
7 Jul	Fishway	0	0	0	0	0	0	0	1	0	1
25 Jul	Fishway	0	0	0	0	0	2	0	0	0	2
27 Jul	Fishway	0	0	0	0	0	2	0	1	0	3
28 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
31 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
	Jul Campbellton, information centre	5	0	0	0	1	1	0	0	5	2
1 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
11 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
11 Aug	Holding pond	1	0	0	0	0	0	0	0	1	0
15 Aug	Fishway	0	0	0	0	0	0	0	1	0	1
19 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
30 Aug	Fishway	0	0	0	0	1	0	0	0	0	1
1 Sep	Fishway	0	0	0	0	1	0	0	0	0	1
2 Sep	Fishway	0	0	0	0	0	2	0	0	0	2
Totals		6	0	0	0	3	13	0	3	6	19
<u>After sorting</u>											
3 Aug	Holding pond	0	0	1	0	0	1	0	0	1	1
24 Aug	Holding pond	0	0	1	0	0	0	0	0	1	0
8 Sep	Fredericton Exhibition	2	0	0	0	0	0	0	0	2	0
14 Sep	Holding pond	0	0	0	0	0	1	0	0	0	1
1 Nov	Holding pond	1	0	0	1	0	0	0	0	2	0
Totals		3	0	2	1	0	2	0	0	6	2

TABLE F-2. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1978.

Date	Mortality location	I-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>Before sorting</u>											
19 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
28 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
3 Jul	Fishway	1	0	0	0	0	1	0	0	1	1
9 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
31 Jul	Fishway	0	0	1	0	0	0	0	0	1	0
10 Sep	Fishway	0	0	0	0	0	0	0	1	0	1
14 Sep	Fishway	0	0	1	0	0	0	0	0	1	0
17 Sep	Fishway	0	0	0	0	0	1	0	0	0	1
21 Sep	Fishway	0	0	0	0	0	1	0	0	0	1
2 Oct	Fishway	0	0	0	0	0	1	0	0	0	1
12 Oct	Fishway	1	0	0	0	0	0	0	0	1	0
21 Oct	Fishway	0	0	1	0	0	0	0	0	1	0
Totals		3	0	3	0	0	6	0	1	6	7
<u>After sorting</u>											
4 Jul	Broodstock	0	0	0	0	0	0	1	0	0	1
6 Jul	N.B. Tourism	2	0	0	0	0	1	0	0	2	1
10 Jul	Disease, experimental	0	0	0	0	1	0	0	0	0	1
12 Jul	St. Andrews, experimental	0	0	4	0	0	0	0	6	4	6
14 Jul	Old Home Week at Woodstock	2	0	0	0	0	1	0	0	2	1
16 Jul	Nose tag, experimental	0	0	1	0	0	0	0	0	1	0
1 Sep	Holding pool	0	0	0	0	0	0	0	1	0	1
7 Sep	Nose tag, experimental	0	0	1	0	0	0	0	0	1	0
13 Sep	Nose tag, experimental	0	0	1	0	0	0	0	0	1	0
25 Sep	Broodstock	0	0	0	0	0	3	0	0	0	3
2 Oct	Disease, experimental	0	0	1	0	0	0	0	0	1	0
9 Oct	Holding pond	0	0	1	0	0	0	0	0	1	0
16 Oct	St. Andrews, experimental	0	0	0	0	0	0	0	1	0	1
24 Oct	Nose tag, experimental	0	0	1	0	0	0	0	0	1	0
31 Oct	Broodstock	0	0	0	0	1	0	0	0	0	1
Totals		4	0	10	0	2	5	1	8	14	16

TABLE F-3. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1979.

Date	Mortality location	1-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>Before sorting</u>											
22 Jun	Holding pond	0	0	0	0	0	1	0	0	0	1
3 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
4 Jul	Fishway	2	0	0	0	0	0	0	0	2	0
9 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
14 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
17 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
20 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
22 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
29 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
30 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
12 Aug	Sorting facilities	0	0	1	0	0	0	0	0	1	0
24 Sep	Fishway	1	0	0	0	0	0	0	0	1	0
28 Sep	Fishway	1	0	0	0	0	0	0	0	1	0
1 Oct	Fishway	1	0	0	0	0	0	0	0	1	0
5 Oct	Fishway	0	0	1	0	0	0	0	0	1	0
9 Oct	Fishway	1	0	0	0	0	0	0	0	1	0
13 Oct	Fishway	0	0	1	0	0	0	0	0	1	0
Totals		14	0	3	0	0	1	0	0	17	1
<u>After sorting</u>											
18 Jul	Holding pond	1	0	0	0	0	0	0	0	1	0
24 Jul	Holding pond	0	0	1	0	0	0	0	0	1	0
21 Aug	Holding pond	0	0	1	0	0	0	0	0	1	0
24 Sep	Broodstock	0	0	0	0	0	2	0	0	0	2
1 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
3 Oct	Broodstock	0	0	0	0	1	0	0	0	0	1
19 Oct	Holding pond	1	0	0	0	0	0	0	0	1	0
22 Oct	Broodstock	0	0	0	0	0	0	1	0	0	1
Totals		2	0	2	0	1	2	1	1	4	5

TABLE F-4. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1980.

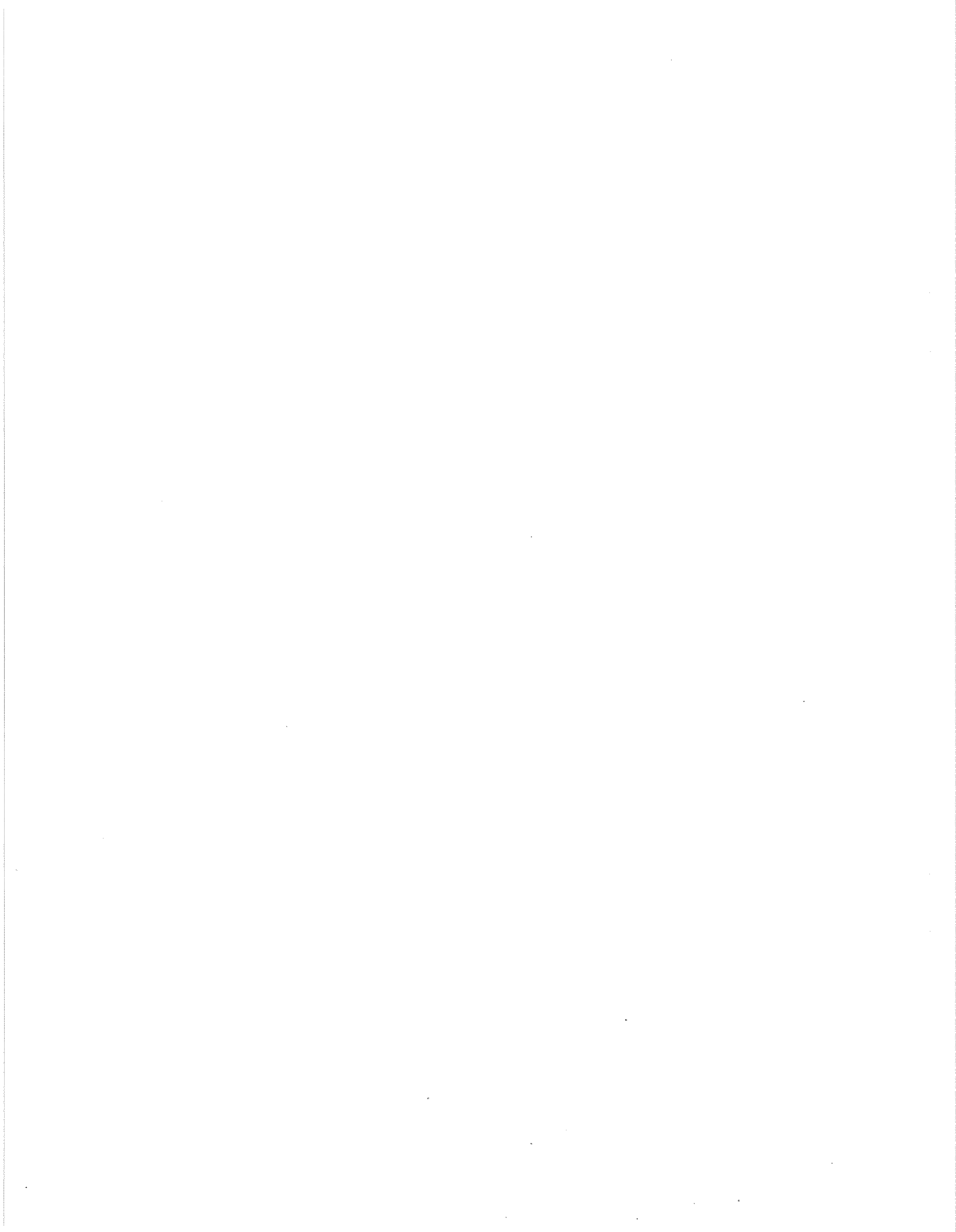
Date	Mortality location	1-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>Before sorting</u>											
21 Jun	Fishway	0	0	0	0	0	1	0	2	0	3
24 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
25 Jul	Holding pond	0	0	0	0	0	1	0	0	0	1
4 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
15 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
23 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
25 Aug	Fishway	0	0	0	0	0	1	0	0	0	1
9 Sep	Fishway	0	0	0	0	0	1	0	0	0	1
12 Sep	Fishway	0	0	0	0	0	1	0	0	0	1
19 Sep	Fishway	0	0	1	0	0	0	0	1	1	1
20 Sep	Fishway	1	0	0	0	0	0	0	0	1	0
22 Sep	Fishway	0	0	0	0	0	1	0	0	0	1
22 Sep	Holding pond	1	0	0	0	0	0	0	0	1	0
23 Sep	Holding pond	0	0	1	0	0	0	0	0	1	0
Totals		2	0	2	0	0	10	0	3	4	13
<u>After sorting</u>											
2 Jul	Holding pond	0	0	0	0	0	1	0	0	0	1
14 Jul	Halifax Lab, experimental	1	0	0	0	0	0	0	0	1	0
22 Jul	Holding pond	0	0	1	0	0	0	0	0	1	0
22 Jul	Experimental	0	0	0	0	0	0	0	1	0	1
30 Jul	Holding pond	0	0	1	0	0	0	0	0	1	0
11 Aug	Holding for St. Croix River	0	0	0	0	0	0	1	0	0	1
Sep	Halifax Lab, experimental	0	0	29	1	0	0	0	0	30	0
19 Sep	Holding pond	0	0	0	0	0	1	0	0	0	1
22 Sep	Broodstock	0	0	0	0	0	1	0	0	0	1
22 Sep	Sex determination, experimental	0	1	0	0	0	0	0	0	1	0
24 Sep	Broodstock	0	0	0	0	0	1	0	0	0	1
26 Sep	Broodstock	0	0	0	0	0	0	0	1	0	1
30 Sep	Broodstock	0	0	0	0	0	1	0	0	0	1
30 Sep	Broodstock	0	0	0	0	0	0	1	0	0	1
7 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
10 Oct	Holding for St. Croix River	0	0	0	0	0	0	0	1	0	1
20 Oct	Broodstock	0	0	0	0	0	2	0	0	0	2
22 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
24 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
29 Oct	Broodstock	0	0	0	0	0	1	0	1	0	2
29 Oct	Sex determination, experimental	1	0	0	0	0	0	0	0	1	0
31 Oct	Sex determination, experimental	0	0	1	0	0	0	0	0	1	0
31 Oct	Sex determination, experimental	1	1	0	1	0	0	0	0	3	0
31 Oct	Broodstock	0	0	0	0	0	0	2	0	0	2
Totals		3	2	32	2	0	8	4	7	39	19

TABLE F-5. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1981.

Date	Mortality location	I-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		I-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<u>Before sorting</u>											
11 Jun	Holding pond	0	0	0	0	0	1	0	0	0	1
20 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
20 Jun	Holding pond	0	0	0	0	0	1	0	0	0	1
2 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
6 Jul	Fishway	0	0	0	0	1	0	0	0	0	1
9 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
10 Jul	Fishway	2	0	1	0	0	0	0	0	3	0
11 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
12 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
13 Jul	Fishway	0	0	0	0	0	1	0	1	0	1
16 Jul	Fishway	1	0	0	0	1	0	0	0	1	1
18 Jul	Fishway	0	1	0	0	0	0	0	0	1	0
19 Jul	Fishway	0	0	0	1	0	0	0	0	1	0
21 Jul	Fishway	2	0	0	0	0	0	0	0	2	0
26 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
27 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
20 Aug	Fishway	0	0	0	0	1	0	0	0	0	1
30 Aug	Fishway	1	0	0	0	0	0	0	0	1	0
26 Sep	Fishway	0	0	1	0	0	0	0	0	1	0
Totals		11	1	2	1	3	5	0	0	15	8
<u>After sorting</u>											
25 Jun	Holding pond	0	0	0	0	0	1	0	0	0	1
2 Jul	Holding pond	0	0	1	0	0	0	0	0	1	0
20 Jul	St. Mary's Indians	0	0	8	2	0	0	3	12	10	15
14 Sep	Died at exhibition	0	0	1	0	0	0	0	0	1	0
28 Sep	Broodstock	0	0	0	0	0	1	0	1	0	2
17 Oct	Broodstock	0	0	0	0	0	0	1	0	0	1
6 Nov	Broodstock	0	0	0	0	0	0	0	1	0	1
Totals		0	0	10	2	0	2	4	14	12	20

TABLE F-6. Daily mortalities of Atlantic salmon collected in the Mactaquac area, 1982.

Date	Mortality location	1-SW				M-SW				Totals	
		Wild		Hatchery		Wild		Hatchery		1-SW	M-SW
		Male	Female	Male	Female	Male	Female	Male	Female		
<b>Before sorting</b>											
12 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
13 Jun	Fishway	0	0	0	0	0	2	0	0	0	2
20 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
22 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
28 Jun	Fishway	0	0	0	0	0	1	0	0	0	1
5 Jul	Holding pond	0	0	0	0	0	1	0	0	0	1
5 Jul	Fishway	1	0	0	0	0	0	0	0	1	0
6 Jul	Migration channel	0	0	0	0	0	0	0	1	0	1
11 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
13 Jul	Fishway	0	0	0	0	0	1	0	0	0	1
Totals		1	0	0	0	0	9	0	1	1	10
<b>After sorting</b>											
8 Jun	Holding pond	0	0	0	0	0	1	0	0	0	1
5 Jul	Broodstock	0	0	0	0	0	0	1	0	0	1
7 Jul	Holding pond	0	0	1	0	0	0	0	0	1	0
3 Aug	Dept. Tourism at Woodstock	2	0	0	0	0	0	0	0	2	0
30 Aug	USA fish, experimental	0	0	1	0	0	0	0	0	1	0
3 Sep	Holding pond	0	0	0	0	1	0	0	0	0	1
15 Sep	USA fish, experimental	0	0	1	0	0	0	0	0	1	0
23 Sep	Broodstock	0	0	0	0	0	0	0	1	0	1
5 Oct	Broodstock	0	0	0	0	0	0	1	1	0	2
12 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
12 Oct	Holding pond	0	1	0	0	0	0	0	0	1	0
13 Oct	Broodstock	0	0	0	0	0	1	0	0	0	1
14 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
26 Oct	Broodstock	0	0	0	0	0	0	0	1	0	1
29 Oct	Broodstock	0	0	0	0	1	0	3	0	0	4
1 Nov	Broodstock	0	0	0	0	0	0	2	1	0	3
2 Nov	Broodstock	0	0	0	0	1	0	2	3	0	6
Jul-Aug	Missing broodstock	0	0	0	0	4	1	0	13	0	18
Totals		2	1	3	0	7	3	9	22	6	41





## APPENDIX G

SEMI-MONTHLY ESTIMATED TOTALS OF FISH OTHER  
THAN ATLANTIC SALMON ASCENDING MACTAQUAC FISH  
COLLECTION FACILITIES, 1977-82

The estimated semi-monthly totals of each species are determined when the fish are transferred from the brail pool to the hopper pool. When fish such as alewives are ascending in large numbers, they are counted by tens as they pass from the brail into the hopper. If the fish are able to pass through the wire mesh (rectangular opening 3.8 cm x 5.1 cm) of the hopper and barrier gates, it is impossible to determine the number that end up in the fish tank truck. Numbers of fish such as eels and perch are not estimated.

TABLE G-1. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1977.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31		
Alewives													
- headpond	248,900		16,100	129,300	90,300	0	0	0	0	0	0	0	484,600
- commercial	439,600	2,064,900	942,000	282,200	0	0	0	0	0	0	0	0	3,728,700
Bass (smallmouth)	0	0	3	1	0	0	0	0	0	0	0	0	4
Bass (striped)	0	0	0	0	0	0	0	0	0	0	0	0	0
Lamprey	0	0	2	23	0	0	0	0	0	0	0	0	25
Pickrel	0	0	3	1	0	1	0	0	0	0	0	0	5
Salmon (sebago)	0	0	0	1	1	0	0	0	0	0	0	0	2
Shad													
- headpond	1		1	69	83	0	0	0	0	0	0	0	154
- commercial	0	805	365	70	0	0	0	0	0	0	0	0	1,240
Suckers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brown)	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brook)	0	0	0	0	0	0	0	0	0	0	0	0	0
Whitefish	0	0	0	0	0	0	0	0	0	1	17	0	18

TABLE G-2. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1978.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31		
Alewives													
- headpond	231,800		66,000	173,000	26,100	0	0	0	0	0	0	0	496,900
- commercial	95,000	2,672,100	1,179,800	0	0	0	0	0	0	0	0	0	3,946,900
Bass (smallmouth)	0	0	1	1	1	1	5	0	0	0	0	0	9
Bass (striped)	0	0	0	0	0	0	9	23	22	0	0	0	54
Lamprey	1	0	7	0	0	0	0	0	0	0	0	0	8
Pickrel	0	0	0	0	0	0	1	0	0	0	0	0	1
Salmon (sebago)	0	0	2	3	2	0	0	0	2	0	0	0	9
Shad													
- headpond	1		2	71	67	1	0	0	0	0	0	0	142
- commercial	0	608	490	0	0	0	0	0	0	0	0	0	1,098
Suckers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brown)	0	0	0	0	0	0	0	0	0	0	1	0	1
Trout (brook)	0	3	6	0	0	0	0	0	0	0	0	0	9
Whitefish	0	0	0	0	0	0	0	0	0	25	65	0	90

TABLE G-3. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1979.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	23-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31		
Alewives													
- headpond	231,200		115,400	136,500	108,700	8,000	0	0	0	0	0	0	599,800
- commercial	151,430	1,392,320	918,370	0	0	0	0	0	0	0	0	0	2,462,100
Bass (smallmouth)	0	0	2	0	1	3	1	0	8	0	0	0	15
Bass (striped)	0	0	0	0	0	0	0	13	2	0	1	0	16
Lamprey	0	0	5	0	0	0	0	0	0	0	0	0	5
Pickrel	0	0	0	0	1	0	1	0	0	0	0	0	2
Salmon (sebago)	0	0	5	3	2	1	4	0	1	1	0	0	17
Shad													
- headpond	9		18	99	47	12	0	0	0	0	0	0	185
- commercial	5	631	258	0	0	0	0	0	0	0	0	0	894
Suckers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brown)	0	0	1	0	0	0	0	0	0	0	0	0	1
Trout (brook)	1	2	25	0	0	1	0	0	0	0	0	0	29
Whitefish	0	0	0	0	0	0	0	0	7	43	134	0	184

TABLE G-4. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1980.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-28	
Alewives													
- headpond	68,200	191,600	122,750	203,600	57,500	18,600	9,950	0	0	0	0	0	663,200
- commercial	0	1,110,850	1,394,490	637,660	0	0	0	0	0	0	0	0	3,143,000
Bass													
(smallmouth)	0	0	3	10	0	1	0	0	0	0	0	0	14
Bass (striped)	0	0	0	0	0	0	0	6	0	0	0	0	6
Lamprey	0	0	2	45	0	0	0	0	0	0	0	0	47
Pickrel	0	0	1	0	0	0	1	0	0	0	0	0	2
Salmon (sebago)	0	0	5	16	28	1	0	0	0	0	0	0	50
Shad													
- headpond	1	19	299	166	35	39	0	2	0	0	0	0	561
- commercial	0	214	447	250	0	0	0	0	0	0	0	0	911
Suckers	0	20	0	0	0	0	0	0	0	0	0	0	20
Trout (brown)	0	0	0	1	0	0	0	0	0	0	2	5	8
Trout (brook)	0	5	19	27	4	1	0	0	0	0	0	0	56
Whitefish	0	0	0	0	0	0	0	0	0	0	0	17	17

TABLE G-5. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1981.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	1-15	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31	
Alewives													
-headpond	144,000	150,600	148,700	107,500	2,000	0	0	0	0	0	0	0	552,800
-commercial	0	914,402	826,132	50,666	0	0	0	0	0	0	0	0	1,791,200
Bass													
(smallmouth)	0	0	4	1	1	2	0	0	0	1	0	0	9
Bass (striped)	0	0	0	0	0	1	90	81	15	0	0	0	187
Lamprey	0	0	0	0	0	0	0	0	0	0	0	0	0
Pickrel	0	0	0	1	0	0	0	1	0	0	0	0	2
Salmon (segabo)	0	1	2	12	3	6	2	2	0	0	0	0	28
Shad													
- headpond	1	6	329	120	0	11	0	20	0	0	0	0	487
- commercial	0	138	360	15	0	0	0	0	0	0	0	0	513
Suckers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brown)	0	0	1	0	2	1	0	0	0	0	1	0	5
Trout (brook)	0	0	6	15	3	0	0	0	0	0	1	1	26
Whitefish	0	0	0	0	0	0	0	0	0	0	1	4	5

TABLE G-6. Semi-monthly estimated totals of fish other than Atlantic salmon ascending Mactaquac fish collection facilities, 1982.

Species	May		Jun		Jul		Aug		Sep		Oct		Totals
	16-31	1-15	16-30	1-15	16-31	1-15	16-31	1-15	16-30	1-15	16-31		
Alewives													
- headpond	471,450	79,300	61,650	25,500	0	0	0	0	0	0	0	0	637,900
- commercial	0	850,952	186,738	0	0	0	0	0	0	0	0	0	1,037,700
Bass (smallmouth)	0	2	3	0	2	0	0	1	0	0	0	0	8
Bass (striped)	0	0	0	0	0	26	32	46	12	7	18	0	141
Lamprey	0	0	0	0	0	0	0	0	0	0	0	0	0
Pickrel	2	1	0	0	1	0	0	0	0	0	0	0	4
Salmon (sebago)	0	0	31	5	2	0	0	0	1	0	0	0	39
Shad													
- headpond	7	0	1	1	6	0	0	2	1	0	0	0	18
- commercial	0	965	115	0	0	0	0	0	0	0	0	0	1,080
Suckers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trout (brown)	0	0	1	0	1	0	0	0	0	0	0	0	2
Trout (brook)	2	37	101	1	0	0	0	0	0	0	0	0	141
Whitefish	0	0	0	0	0	0	0	0	0	5	44	0	49



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