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Densities of Freshwater Fishes (Non-Atlantic Salmon), Miramichi River System, New Brunswick, 1970-78

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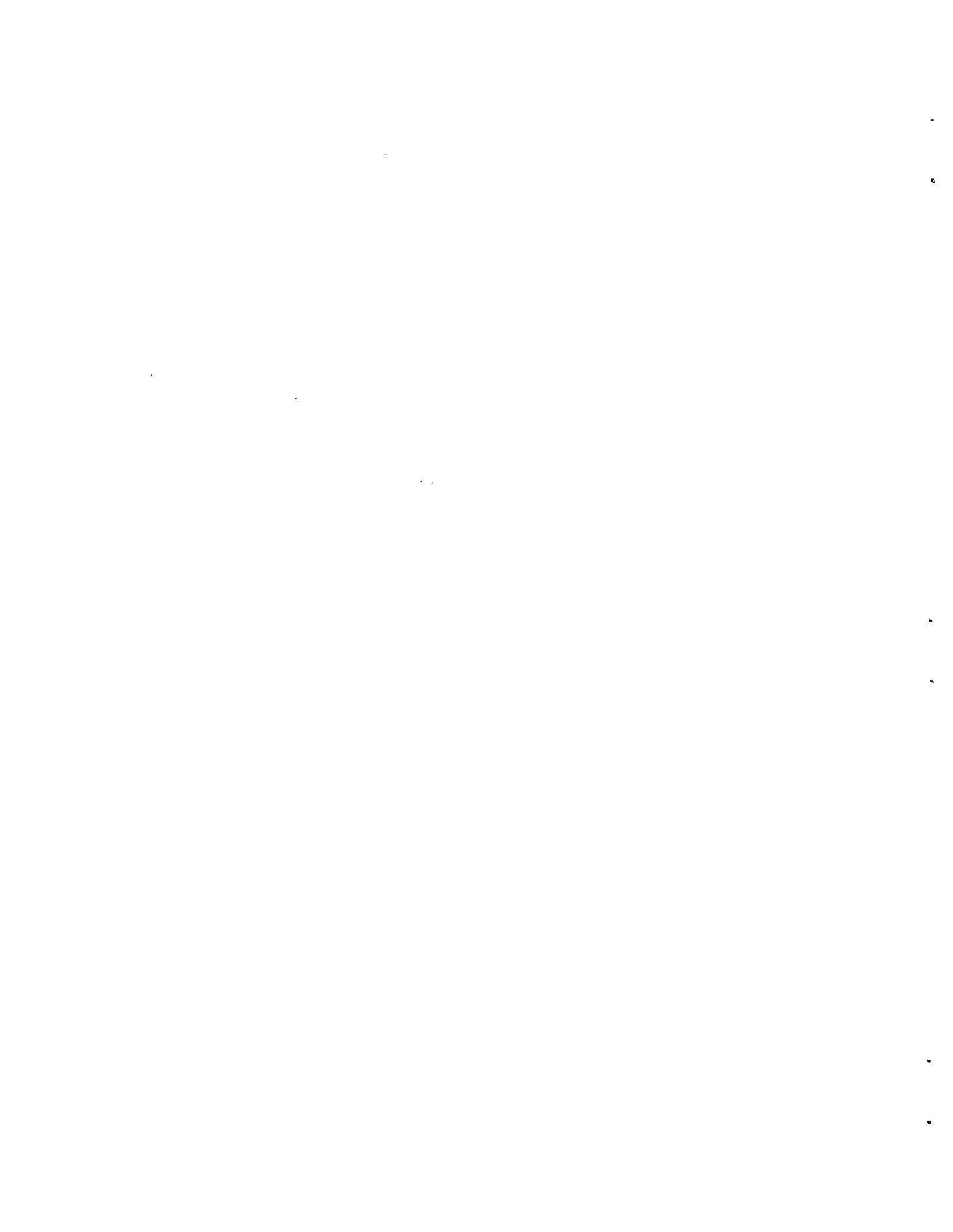
DENSITIES OF FRESHWATER FISHES
(NON-ATLANTIC SALMON)
MIRAMICHI RIVER SYSTEM, NEW BRUNSWICK
1970-78

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ABSTRACT

Schofield, E.J. and J.L. Peppar. 1979. Densities of freshwater fishes(non-Atlantic salmon), Miramichi River system, New Brunswick, 1970-78. Can. Data Rep. Fish. Aquat. Sci. No. 170. 52 p.

Electroseining operations were conducted throughout the freshwater reaches of the Miramichi River system, New Brunswick, to determine population densities of the fish species present. Though the main emphasis of these operations was placed on deriving juvenile Atlantic salmon population estimates, data were also collected on the other species present. This report presents the calculated densities obtained from these operations over the period 1970-78, for all species other than Atlantic salmon, and includes data on areas sampled, average depths and water temperatures of the individual sites sampled.

Key words: Miramichi River, electroseining, population density, non-salmon species, area sampled, water depth, water temperature.

RÉSUMÉ

Schofield, E.J. and J.L. Peppar. 1979. Densities of freshwater fishes(non-Atlantic salmon), Miramichi River system, New Brunswick, 1970-78. Can. Data Rep. Fish. Aquat. Sci. No. 170. 52 p.

Des opérations d'électrosennage ont été menées dans les affluents d'eau douce du réseau de la rivière Miramichi, au Nouveau-Brunswick, afin de déterminer la densité de population des espèces de poissons présentes. Bien que le principal objectif du programme consistât à évaluer la densité de population du jeune saumon atlantique, ces activités ont également rendu possible la collecte de données sur d'autres espèces. Le présent rapport contient le calcul des densités pour tous les poissons autres que le saumon atlantique, obtenues à l'aide des échantillonnages effectués de 1970 à 1978, ainsi que les données sur les zones échantillonnées et la profondeur moyenne et la température de l'eau des lieux étudiés.

Mots clés: Rivière Miramichi, électrosennage, densité de population, espèces autres que le saumon, zone échantillonnée, profondeur de l'eau, température de l'eau.

INTRODUCTION

Electroseining operations to determine population densities of fish species present were conducted yearly throughout the freshwater reaches of the Miramichi River system, New Brunswick, over the period 1969-78. Operations each year concentrated on the repetition of sites sampled in previous years, so that consecutive-year comparisons could be drawn. The main emphasis of these operations was placed on deriving juvenile Atlantic salmon population estimates; however, data were also collected on the other species present.

Calculated densities (numbers/83.6 m² or 100 yd²) of juvenile Atlantic salmon for all sites sampled (1969-77) by the electroseining operations have been presented (Peppar and Schofield 1978). This report summarizes calculated densities obtained for all other fish species captured from these operations, over the period 1970-78. Miscellaneous data (areas sampled, average depths and water temperatures) collected during the operations are also presented.

SCOPE OF OPERATIONS

The electroseining operations were conducted on a number of selected streams throughout the Miramichi River system (Figure). Most of the streams studied were inaccessible for much of their length; thus, sampling sites had to be selected in areas of reasonable access by standard vehicle.

METHODS AND PRESENTATION OF DATA

All methods employed in the actual electroseining operations and used in deriving the population estimates have been presented (Peppar and Schofield 1978). Miscellaneous data collected from the operations and summarized in the tables to follow include: areas of sites sampled (total enclosed area per site sampled), average depths of sites (average depth of each site, based on a minimum of usually nine measurements per site) and water temperatures of sites (taken within each site, just prior to the seining operations). These data are summarized for all individual sites by year, over the nine years of sampling.

The calculated densities of all species obtained for the individual sites sampled each year are summarized. These species include:

Designation in table	Common name	Scientific name
Lamprey	Sea lamprey	<i>Petromyzon marinus</i>
Eel	American eel	<i>Anguilla rostrata</i>
Trout	Brook trout	<i>Salvelinus fontinalis</i>
Dace	Blacknose dace	<i>Rhinichthys atratulus</i>
Chub	Lake chub	<i>Couesius plumbeus</i>
	Creek chub	<i>Semotilus atromaculatus</i>
Shiner	Common shiner	<i>Notropis cornutus</i>
Sucker	White sucker	<i>Catostomus commersoni</i>
Stickleback	Threespine stickleback	<i>Gasterosteus aculeatus</i>
	Brook stickleback	<i>Culaea inconstans</i>
	Ninespine stickleback	<i>Pungitius pungitius</i>
Sculpin	Slimy sculpin	<i>Cottus cognatus</i>

The preceding list includes the species or "species-groups", other than Atlantic salmon, most often represented in the electroseining catches. Species names represent the most commonly-captured (or in some cases, exclusively captured) representatives of each of these species or "species-groups". Common and scientific names given are those recommended by the American Fisheries Society (1970).

RESULTS

The streams and corresponding numbers of sites where electroseining operations were conducted are summarized (Table 1). The table indicates the location of each stream by specific area within the system (Main Miramichi-streams flowing into Miramichi Bay or estuary; Northwest Miramichi-streams flowing into the Northwest Miramichi River; and Southwest Miramichi-streams flowing into the Southwest Miramichi River), and presents the total area sampled and numbers of each species or "species group" captured each year.

Calculated densities of species obtained for each stream and individual site sampled are presented (Tables 2-28). The overall mean densities for each species and for the Miramichi River system for each year of sampling are also presented (Table 29). Miscellaneous data are summarized for each site and year (Tables 30-56).

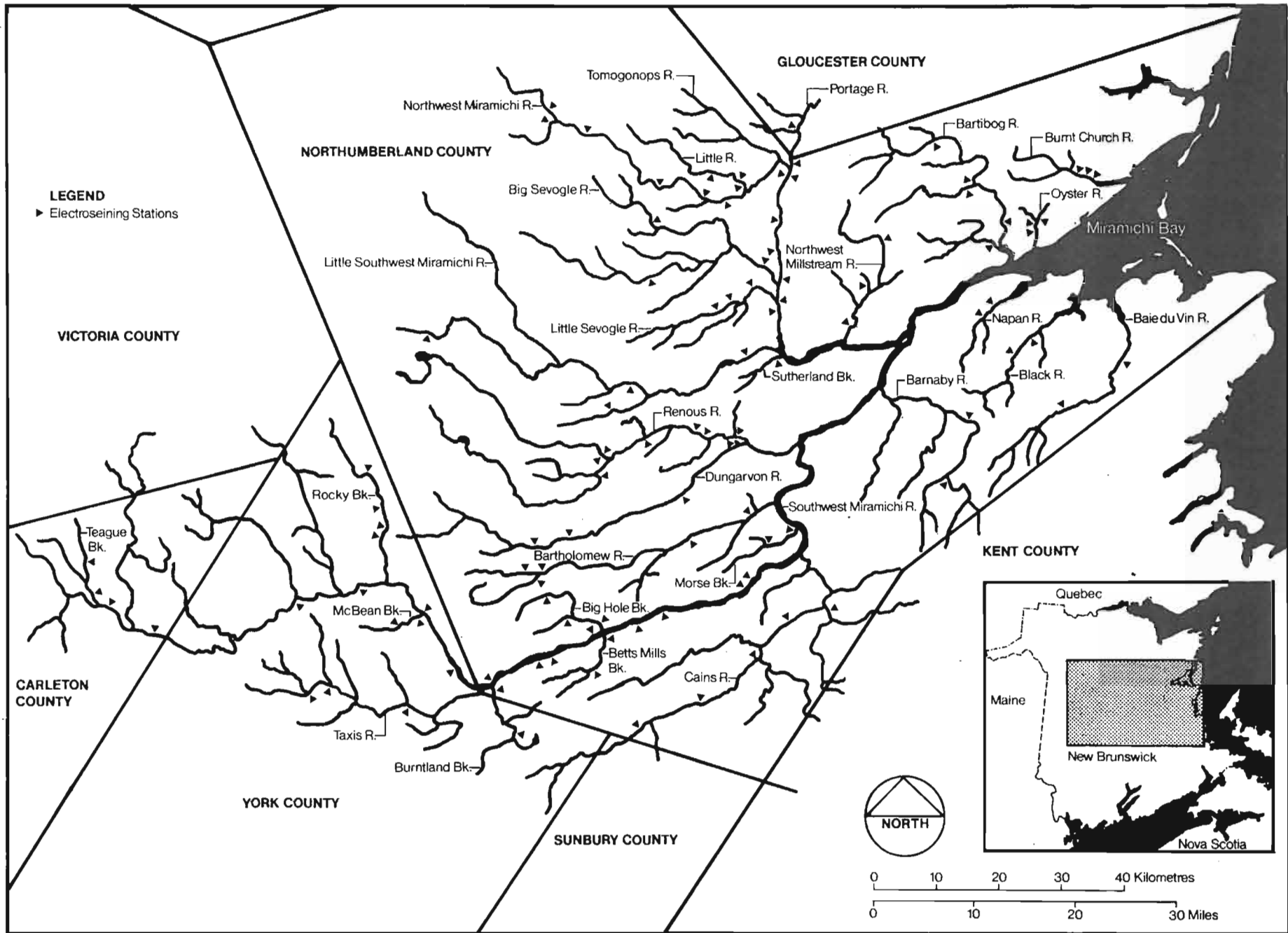


FIG. Electroseining stations, Miramichi River system, New Brunswick.

TABLE 1. Streams and numbers of sites on the Miramichi River system where electroseining operations were conducted, 1970-78.

Stream	Numbers of sites sampled								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
<u>Main Miramichi River</u>									
Baie du Vin River	0	2	2	2	2	2	2	2	2
Black River	0	2	2	2	2	2	2	2	2
Napan River	0	2	2	2	2	2	2	2	2
Burnt Church River	0	2	2	2	2	2	2	2	2
Oyster River	3	3	3	3	2	2	2	2	2
Bartibog River	4	4	5	5	5	5	5	5	5
<u>Northwest Miramichi River</u>									
Northwest Miramichi River	0	0	0	0	12	11	10	11	11
Tomogonops River	0	1	0	1	1	0	0	0	0
Little River	0	1	0	2	2	2	2	2	2
Portage River	0	0	1	1	2	2	2	2	2
Little Sevogle River	3	3	3	3	3	3	3	3	3
Little Southwest Miramichi River	0	4	4	4	4	4	4	4	4
Sutherland Brook	1	1	1	1	1	1	1	1	1
Northwest Millstream	3	3	3	3	3	0	0	0	0
Big Sevogle River	0	0	0	0	3	3	3	3	3
<u>Southwest Miramichi River</u>									
Dungarvon River	0	0	0	0	3	3	2	3	3
Barnaby River	0	2	2	2	2	2	2	2	2
Renous River	5	5	4	7	6	6	5	5	5
Main Southwest Miramichi River	14	14	12	14	14	14	10	12	13
Bartholomew River	3	3	3	3	4	0	0	0	0
Morse Brook	2	2	2	2	2	2	2	1	2
Cains River	0	4	4	4	4	4	4	4	4
Big Hole Brook	3	3	3	3	3	3	3	3	3
Betts Mill Brook	2	2	2	2	2	2	2	2	2
Burntland Brook	0	2	2	2	2	2	1	2	2
Taxis River	0	0	3	3	3	3	3	3	3
MacBean Brook	2	2	2	2	2	2	2	2	2
Rocky Brook	3	4	3	3	3	3	2	4	3
Teague Brook	2	2	2	2	2	2	2	2	2
<u>Totals</u>	50	73	72	80	98	89	80	86	87
Total area sampled (m ²)	14,579	22,698	23,323	25,527	32,207	29,044	26,056	28,644	29,103
Total numbers of fish captured:									
Lamprey	208	289	348	190	197	196	251	286	226
Eel	36	261	334	283	271	261	235	218	164
Trout	1,095	1,788	1,241	869	1,065	738	651	882	583
Dace	2,325	6,007	6,072	3,925	4,499	4,367	3,902	3,742	3,762
Chub	51	402	254	105	178	161	380	421	443
Shiner	2,950	3,349	2,218	1,966	1,083	1,234	899	603	1,477
Sucker	322	1,628	623	298	227	283	160	285	185
Stickleback	424	334	152	116	204	286	242	205	63
Sculpin	2,033	2,368	1,699	1,831	1,880	1,839	1,832	1,804	2,182

TABLE 2. Calculated densities of lamprey, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	11.7	2.4	18.5	1.4	1.5	<1	1.4	2.4
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
Black River	1	-	8.5	6.4	<1	6.9	2.3	7.6	41.5	2.6
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
Napan River	1	-	5.2	14.4	71.3	16.4	83.3	177.7	4.4	4.4
	2	-	4.3	<1	<1	<1	2.3	<1	<1	<1
Burnt Church River	1	-	15.6	7.8	<1	-	-	-	-	-
	2	-	<1	<1	<1	<1	<1	<1	1.1	<1
	3	-	-	-	-	<1	<1	1.0	7.9	<1
Oyster River	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	-	-	-	-	-
Bartibog River	1	3.6	66.2	1.1	<1	<1	<1	71.3	7.1	5.5
	2	24.5	11.3	5.5	13.9	3.7	17.6	2.0	13.1	8.2
	3	54.7	63.1	3.7	<1	<1	<1	<1	1.5	<1
	4	<1	<1	1.5	<1	<1	<1	<1	<1	<1
	6	-	-	20.0	<1	3.2	2.6	11.3	6.1	<1
Overall mean		11.9	12.5	4.1	6.8	2.4	7.5	18.3	5.7	1.8
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 3. Calculated densities of lamprey, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	0	-	0	0	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	2.5	-	<1	-	-	-	-	-
	2	-	-	-	<1	<1	<1	<1	<1	<1
	12	-	-	-	-	<1	<1	<1	<1	<1
Portage River	1	-	-	3.1	6.1	<1	<1	1.1	<1	<1
	8	-	-	-	-	<1	<1	7.3	<1	<1
Little Sevogle River	1	1.1	<1	<1	<1	<1	<1	<1	1.5	<1
	2	1.0	2.4	<1	<1	<1	<1	1.6	1.8	2.0
	3	2.1	<1	<1	<1	2.7	<1	<1	1.4	<1
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	<1	<1	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	1.1	<1	<1	<1	<1	<1
Sutherland Brook	1	0	0	0	0	0	0	0	0	0
Northwest Millstream	1	<1	<1	<1	<1	<1	-	-	-	-
	2	<1	<1	<1	<1	<1	-	-	-	-
	3	<1	<1	<1	<1	<1	-	-	-	-
Big Sevogle River	1	-	-	-	-	<1	<1	<1	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	5.7	<1
	3	-	-	-	-	3.2	-	-	-	-
	4	-	-	-	-	3.4	<1	<1	<1	<1
	5	-	-	-	-	1.7	<1	<1	<1	1.1
	7	-	-	-	-	1.2	<1	1.1	<1	6.5
	9A	-	-	-	-	<1	<1	<1	<1	<1
	9B	-	-	-	-	1.5	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	-	<1	<1
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		0.8	0.7	0.7	0.9	0.8	0.5	0.9	0.8	0.8
Total number of estimates		7	13	12	15	31	26	24	26	26

TABLE 4. Calculated densities of lamprey, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	<1	-	<1	<1
	2	-	-	-	-	<1	<1	<1	14.1	100.6
	3	-	-	-	-	<1	<1	<1	2.1	<1
Barnaby River	1	-	1.7	5.5	1.2	2.1	<1	<1	5.0	3.7
	2	-	1.5	3.8	<1	<1	<1	<1	<1	<1
Renous River	1	<1	<1	-	<1	-	-	-	-	-
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	4.0	1.4	8.7	<1	<1	<1	2.1	1.2	1.3
	4	1.1	-	-	-	-	-	-	-	-
	5	5.0	5.9	<1	6.0	<1	<1	<1	<1	1.3
	6	-	1.6	-	<1	<1	<1	-	-	-
	7	-	-	<1	<1	<1	<1	2.2	<1	<1
	8	-	-	-	<1	<1	<1	<1	<1	<1
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	1.2	<1	<1
	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
	10	1.3	<1	<1	<1	<1	1.2	1.9	<1	<1
	14	<1	4.9	-	1.0	7.8	<1	<1	<1	<1
	11	<1	<1	<1	<1	<1	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	<1	<1
	5	<1	<1	17.9	1.5	<1	<1	<1	<1	<1
	13	<1	<1	<1	<1	<1	1.3	<1	<1	<1
	1	<1	1.2	3.0	1.5	<1	1.3	<1	1.9	1.0
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bartholomew River	9	<1	<1	<1	<1	<1	<1	-	<1	<1
	12	<1	<1	15.7	<1	<1	1.3	<1	<1	2.0
	8	3.2	1.6	23.4	2.8	15.0	3.1	6.4	3.6	<1
	1	1.5	<1	<1	<1	<1	-	-	-	-
	2	<1	1.4	<1	<1	<1	-	-	-	-
	3	<1	-	-	-	-	-	-	-	-
	4	-	<1	<1	<1	<1	-	-	-	-
Morse Brook	6	-	-	-	-	<1	-	-	-	-
	1	<1	<1	<1	<1	<1	<1	<1	20.1	7.2
	2	<1	<1	<1	<1	<1	<1	<1	-	<1
	3	-	-	<1	<1	<1	<1	<1	<1	<1
Cains River	4	-	<1	15.8	<1	8.4	14.1	1.7	2.2	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
	7	-	<1	-	-	-	-	-	-	-
	8	-	<1	<1	<1	<1	<1	<1	<1	<1
	1	<1	<1	<1	<1	<1	1.6	13.1	<1	<1
Betts Mill Brook	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1	1.1	<1	2.2	<1	<1	<1	<1	<1	<1
Burntland Brook	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1	-	<1	<1	<1	<1	<1	<1	<1	<1
Taxis River	2	-	<1	<1	<1	<1	<1	-	<1	<1
	1	-	-	<1	<1	<1	<1	<1	<1	<1
	2	-	-	<1	<1	<1	<1	<1	<1	<1
MacBean Brook	3	-	-	<1	<1	<1	<1	<1	<1	<1
	1	3.8	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Overall mean		0.9	0.8	2.6	0.7	1.1	0.9	1.2	1.5	2.9
Total number of estimates		36	45	44	49	52	48	38	45	46

TABLE 5. Calculated densities of eel, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	13.5	3.5	5.4	2.7	8.3	1.1	<1	1.5
	2	-	8.4	8.3	4.0	1.8	3.7	3.4	2.5	3.3
Black River	1	-	10.3	1.5	2.7	1.7	3.4	3.4	<1	1.3
	2	-	1.3	<1	<1	<1	<1	<1	<1	<1
Napan River	1	-	5.1	25.7	28.8	20.6	15.6	14.1	3.9	7.2
	2	-	<1	8.9	8.6	9.6	2.7	6.3	15.4	2.6
Burnt Church River	1	-	<1	<1	<1	-	-	-	-	-
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	-	-	-	2.7	1.7	1.9	3.3	<1
Oyster River	1	<1	<1	<1	1.5	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	3.4	<1	<1	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	1.4	<1	5.8	2.3	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	4	1.3	<1	2.7	<1	<1	1.9	<1	<1	<1
	5	-	-	<1	2.2	<1	<1	<1	<1	<1
	6	-	-	<1	2.2	<1	<1	<1	<1	<1
Overall mean		0.6	3.1	3.5	3.6	3.3	2.9	2.3	2.0	1.4
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 6. Calculated densities of eel, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	1.8	-	<1	<1	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	<1	-	<1	-	-	-	-	-
	2	-	-	-	<1	<1	<1	<1	<1	<1
	12	-	-	-	-	<1	1.4	<1	<1	<1
Portage River	1	-	-	<1	<1	<1	3.3	<1	1.1	<1
	8	-	-	-	-	<1	4.6	1.9	1.2	<1
Little Sevogle River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	1.1
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	<1	1.7	<1	<1	<1	1.3	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	1.5	2.2	2.4	<1	3.7	<1	1.2
Sutherland Brook	1	1.1	5.0	9.0	2.0	<1	<1	2.3	<1	<1
Northwest Millstream	1	3.9	8.1	9.5	9.7	10.1	-	-	-	-
	2	<1	1.4	<1	<1	<1	-	-	-	-
	3	<1	<1	<1	<1	<1	-	-	-	-
Big Sevogle River	1	-	-	-	-	<1	<1	<1	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	1.2	<1
Northwest Miramichi River	2	-	-	-	-	-	<1	4.4	<1	<1
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	<1	<1	<1	<1	<1
	5	-	-	-	-	<1	<1	<1	<1	<1
	7	-	-	-	-	<1	<1	<1	<1	<1
	9A	-	-	-	-	1.1	<1	<1	1.1	<1
	9B	-	-	-	-	1.1	<1	<1	<1	<1
	13	-	-	-	-	<1	2.4	1.6	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	1.1	<1	<1	<1
	17	-	-	-	-	1.1	<1	-	<1	5.8
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	1.1	<1	<1	
Overall mean		1.1	1.6	2.1	1.3	0.9	0.9	1.0	0.6	0.8
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 7. Calculated densities of eel, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	<1	-	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Barnaby River	1	-	5.3	5.9	6.1	2.5	4.3	2.0	4.7	3.2
	2	-	20.5	3.7	3.7	2.4	5.3	2.6	5.9	2.6
Renous River	1	<1	<1	-	<1	-	-	-	-	-
	2	<1	4.0	<1	1.2	2.6	3.8	4.1	7.6	2.7
	3	<1	1.2	1.3	<1	<1	<1	<1	<1	<1
	4	<1	-	-	-	-	-	-	-	-
	5	<1	<1	<1	1.1	<1	<1	11.9	<1	<1
	6	-	<1	-	<1	<1	<1	-	-	-
	7	-	-	1.2	<1	<1	1.3	1.0	<1	<1
	8	-	-	-	<1	<1	<1	<1	<1	<1
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	<1	<1	<1
	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	14	<1	<1	-	<1	<1	<1	<1	2.1	<1
	11	<1	<1	<1	<1	<1	<1	-	-	-
	6	<1	<1	3.7	1.3	<1	<1	-	<1	<1
	5	<1	<1	<1	<1	<1	1.5	1.2	<1	<1
	13	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bartholomew River	9	<1	<1	<1	<1	<1	<1	-	<1	<1
	12	<1	<1	<1	<1	<1	<1	<1	<1	<1
	8	<1	<1	<1	<1	<1	1.5	<1	<1	<1
	1	<1	<1	<1	<1	<1	-	-	-	-
	2	<1	<1	<1	<1	<1	-	-	-	-
Morse Brook	3	<1	-	-	-	-	-	-	-	-
	4	-	<1	<1	<1	<1	-	-	-	-
	6	-	-	-	-	<1	-	-	-	-
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cains River	2	<1	<1	<1	<1	<1	<1	<1	-	<1
	3	-	-	<1	<1	<1	<1	<1	<1	<1
Big Hole Brook	4	-	<1	1.0	<1	2.8	<1	<1	<1	<1
	6	-	<1	1.5	<1	<1	<1	1.3	3.6	<1
	7	-	<1	-	-	-	-	-	-	-
	8	-	<1	<1	<1	<1	<1	<1	<1	<1
Betts Mill Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Burntland Brook	1	-	<1	1.3	<1	1.2	1.0	<1	1.3	1.7
	2	-	<1	<1	<1	<1	<1	-	<1	<1
Taxis River	1	-	-	<1	<1	<1	<1	<1	<1	1.1
	2	-	-	<1	<1	<1	<1	<1	<1	<1
	3	-	-	<1	<1	<1	<1	<1	<1	<1
MacBean Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	<1	<1	<1	<1	<1	2.3	-	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	-	-	-	-	-	-	-
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
Teague Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Overall mean		0.5	1.1	0.9	0.7	0.7	0.9	1.0	1.0	0.7
Total number of estimates		36	45	44	49	52	48	40	45	46

TABLE 8. Calculated densities of brook trout, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	2.0	1.9	<1	<1	5.6	<1	1.3	1.7
Black River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	<1	<1	<1	<1	<1	<1	<1	1.2
Napan River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
Burnt Church River	1	-	1.2	7.2	1.7	-	-	-	-	-
	2	-	5.1	1.9	1.9	4.1	2.8	<1	<1	5.2
	3	-	-	-	-	2.5	1.1	5.1	25.4	5.8
Oyster River	1	16.2	12.0	1.5	15.3	17.4	8.9	25.9	27.5	18.5
	2	33.2	23.6	9.3	21.8	17.9	9.5	47.7	48.4	18.9
	3	14.4	19.9	16.3	24.1	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	<1	<1	<1	1.1	1.0
	2	8.2	<1	<1	<1	2.9	3.6	<1	6.3	1.8
	3	1.1	2.1	<1	<1	1.5	5.0	3.7	2.1	2.0
	4	2.2	1.8	3.6	<1	1.1	3.9	<1	13.6	1.8
	6	-	-	<1	<1	4.4	1.1	2.9	5.6	5.6
Overall mean		10.8	4.8	2.9	4.4	3.7	3.0	6.0	9.0	4.4
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 9. Calculated densities of brook trout, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	1.8	-	<1	4.2	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	<1	-	<1	-	-	-	-	-
	2	-	-	-	7.2	1.4	<1	3.1	4.5	<1
	12	-	-	-	-	2.3	6.7	5.2	1.1	<1
Portage River	1	-	-	1.3	<1	3.1	<1	<1	<1	<1
	8	-	-	-	-	15.1	1.5	8.2	9.7	1.1
Little Sevogle River	1	<1	2.7	1.3	<1	<1	<1	1.5	<1	<1
	2	<1	4.2	<1	<1	<1	4.9	<1	<1	12.4
	3	<1	2.0	1.3	<1	1.3	<1	<1	<1	1.6
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	<1	<1	<1	<1	<1	<1	<1	<1
	4	-	5.8	10.9	42.4	3.2	12.3	3.2	7.7	8.0
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
Sutherland Brook	1	23.7	24.2	37.3	32.1	31.7	10.6	33.0	22.4	9.4
Northwest Millstream	1	<1	<1	<1	<1	<1	-	-	-	-
	2	1.8	<1	10.5	2.4	<1	-	-	-	-
	3	2.3	13.4	5.3	4.3	2.4	-	-	-	-
Big Sevogle River	1	-	-	-	-	<1	<1	<1	<1	<1
	2	-	-	-	-	1.2	<1	<1	<1	<1
	3	-	-	-	-	2.9	2.3	<1	2.6	1.0
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	<1	<1
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	<1	<1	1.7	<1	<1
	5	-	-	-	-	<1	<1	2.3	<1	<1
	7	-	-	-	-	<1	<1	<1	<1	<1
	9A	-	-	-	-	<1	<1	<1	<1	<1
	9B	-	-	-	-	<1	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	1.1	39.5	-	<1	3.2
18	-	-	-	-	12.0	13.0	5.2	9.4	3.0	
19	-	-	-	-	13.1	7.7	7.8	5.0	3.9	
Overall mean		4.3	4.4	5.9	6.2	3.3	4.1	3.2	2.8	2.0
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 10. Calculated densities of brook trout, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	<1	-	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Barnaby River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	2.9	<1	2.7	1.5	3.5	<1	<1	1.6
Renous River	1	<1	<1	-	<1	-	-	-	-	-
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	8.2	8.1	<1	<1	3.1	<1	<1	<1	<1
	4	<1	-	-	-	-	-	-	-	-
	5	<1	<1	<1	<1	<1	2.2	<1	<1	<1
	6	-	<1	-	<1	<1	<1	-	-	-
	7	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	<1	<1	<1	<1	<1	<1
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	<1	<1	<1
	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	14	<1	<1	-	<1	<1	<1	<1	<1	<1
	11	<1	<1	<1	<1	<1	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	<1	<1
	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	13	<1	<1	<1	<1	<1	2.1	<1	<1	<1
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9	<1	<1	1.4	<1	<1	<1	-	<1	<1
	12	1.4	<1	<1	<1	<1	<1	<1	<1	<1
8	3.8	16.9	5.1	6.6	5.9	2.1	<1	<1	<1	
Bartholomew River	1	<1	<1	<1	<1	<1	-	-	-	-
	2	1.2	2.2	53.3	<1	<1	-	-	-	-
	3	7.1	-	-	-	-	-	-	-	-
	4	-	13.5	4.8	20.5	9.6	-	-	-	-
	6	-	-	-	-	5.2	-	-	-	-
Morse Brook	1	80.0	20.9	7.9	7.8	2.3	1.9	<1	7.6	5.9
	2	17.5	83.9	8.4	52.1	11.3	45.5	42.0	-	20.3
Cains River	3	-	-	1.6	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
	7	-	<1	-	-	-	-	-	-	-
	8	-	5.1	10.7	2.7	8.7	8.1	2.0	3.3	4.6
Big Hole Brook	1	1.7	6.7	1.2	3.4	1.2	<1	3.4	1.7	<1
	2	56.1	46.9	35.5	25.1	49.9	26.0	16.8	20.1	15.4
	3	<1	1.4	<1	<1	<1	<1	<1	<1	<1
Betts Mill Brook	1	19.8	31.5	18.4	11.8	17.6	17.3	21.7	9.7	8.9
	2	49.7	60.4	44.9	7.6	11.9	5.4	5.2	14.2	9.2
Burntland Brook	1	-	<1	<1	<1	3.1	4.1	<1	<1	2.5
	2	-	12.2	15.0	<1	2.0	8.7	-	8.1	1.6
Taxis River	1	-	-	<1	<1	<1	<1	<1	<1	<1
	2	-	-	<1	<1	<1	<1	<1	<1	<1
	3	-	-	2.1	<1	2.1	<1	<1	<1	<1
MacBean Brook	1	26.3	24.1	19.7	4.4	2.1	12.5	5.3	358.3	<1
	2	28.7	28.2	16.7	6.5	3.3	18.7	11.9	11.4	4.5
Rocky Brook	1	2.5	11.2	6.2	1.3	5.6	1.4	-	3.1	<1
	2	7.4	12.3	11.8	7.1	1.9	1.0	2.3	2.3	1.6
	3	3.4	27.8	-	-	-	-	-	-	-
	4	-	6.2	12.5	4.4	<1	2.2	5.6	2.7	<1
Teague Brook	1	4.0	16.4	<1	7.6	2.7	14.3	<1	1.2	3.4
	2	22.2	28.5	13.2	18.1	16.7	13.2	7.5	21.9	19.4
Overall mean		9.7	10.6	6.9	4.2	3.5	4.3	3.5	10.7	2.5
Total number of estimates		36	45	44	49	52	48	40	45	46

TABLE 11. Calculated densities of dace, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	173.5	116.7	69.1	36.7	58.2	23.4	56.3	42.2
	2	-	133.2	108.0	37.8	43.3	32.8	86.4	42.1	71.0
Black River	1	-	119.2	62.4	19.8	24.6	13.5	58.6	56.8	79.2
	2	-	35.5	45.3	12.9	8.0	11.9	26.1	24.1	29.4
Napan River	1	-	30.1	17.9	16.2	13.8	17.9	19.7	10.1	46.6
	2	-	213.4	82.4	85.8	90.4	151.0	36.8	51.7	42.0
Burnt Church River	1	-	0	0	0	-	-	-	-	-
	2	-	0	0	0	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Oyster River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	-	-	-	-	-
Bartibog River	1	7.6	13.8	7.8	3.6	16.4	9.8	31.0	11.6	9.4
	2	3.6	12.9	5.6	3.8	2.0	9.0	14.3	15.1	2.7
	3	11.4	11.1	26.1	10.8	5.2	14.7	16.9	5.3	6.8
	4	13.2	42.3	19.1	8.4	17.9	12.5	16.6	4.2	14.5
	5	-	-	17.8	25.3	24.7	15.1	23.1	7.5	5.8
	6	-	-	17.8	25.3	24.7	15.1	23.1	7.5	5.8
Overall mean		5.3	52.4	31.9	18.4	18.9	23.2	23.6	19.1	23.4
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 12. Calculated densities of dace, as determined by electroseining in the Miramichi River system, 1970-78, sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	1.1	-	7.7	4.6	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	6.3	-	4.4	-	-	-	-	-
	2	-	-	-	7.6	1.6	2.4	8.2	7.2	4.5
	12	-	-	-	-	6.6	12.5	5.3	1.2	2.4
Portage River	1	-	-	23.1	31.4	19.3	14.5	38.5	28.0	38.0
	8	-	-	-	-	8.8	28.2	12.5	5.7	21.0
Little Sevogle River	1	14.8	7.6	6.5	24.3	5.4	66.4	5.7	3.1	1.4
	2	106.2	27.8	24.3	26.9	8.4	8.3	7.5	5.4	6.3
	3	8.8	12.4	13.5	13.3	14.8	19.4	16.1	16.0	5.1
Little Southwest Miramichi River	1	-	4.1	12.4	1.2	2.0	10.7	3.8	5.7	6.8
	3	-	7.4	10.5	2.4	3.0	1.3	19.7	2.5	<1
	4	-	3.0	1.8	<1	1.6	2.0	8.7	5.5	1.7
	6	-	4.4	8.0	1.8	11.5	1.1	9.1	1.4	4.7
Sutherland Brook	1	0	0	0	0	0	0	0	0	0
Northwest Millstream	1	37.6	29.4	32.4	58.7	10.0	-	-	-	-
	2	53.0	75.2	58.8	91.7	31.6	-	-	-	-
	3	18.7	41.2	28.5	24.7	22.2	-	-	-	-
Big Sevogle River	1	-	-	-	-	7.8	5.6	7.2	<1	20.6
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	1.7	<1
Northwest Miramichi River	2	-	-	-	-	-	13.5	6.0	8.3	12.5
	3	-	-	-	-	13.1	-	-	-	-
	4	-	-	-	-	11.3	4.4	8.1	6.4	10.0
	5	-	-	-	-	9.6	52.2	9.6	23.5	63.4
	7	-	-	-	-	10.9	5.4	2.5	10.2	13.7
	9A	-	-	-	-	22.6	34.1	31.2	10.0	18.7
	9B	-	-	-	-	31.5	11.5	23.9	9.4	12.1
	13	-	-	-	-	8.1	2.7	1.3	6.1	4.0
	14	-	-	-	-	17.4	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	-	<1	<1
	18	-	-	-	-	<1	<1	<1	<1	<1
	19	-	-	-	-	<1	<1	<1	<1	<1
Overall mean		34.2	16.9	18.3	19.8	9.3	11.5	9.1	6.2	9.6
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 13. Calculated densities of dace, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	12.3	35.1	-	6.7	28.2
	2	-	-	-	-	8.4	9.8	<1	2.2	5.8
	3	-	-	-	-	6.5	4.8	3.3	3.8	1.1
Barnaby River	1	-	112.2	31.9	35.5	35.5	78.6	17.3	100.3	60.2
	2	-	163.8	88.6	58.6	40.9	101.6	74.4	77.2	107.3
Renous River	1	28.7	12.5	-	5.9	-	-	-	-	-
	2	16.2	23.7	37.0	11.9	9.4	11.9	9.6	5.3	8.0
	3	42.5	30.0	33.8	12.7	29.5	30.8	12.4	21.8	7.3
	4	32.4	-	-	-	-	-	-	-	-
	5	58.1	42.2	26.8	17.4	25.2	25.2	28.4	10.8	12.0
	6	-	11.9	-	6.4	8.9	8.1	-	-	-
	7	-	-	12.6	7.2	8.9	3.5	11.9	20.6	8.0
	8	-	-	-	25.8	33.0	61.4	10.8	11.2	15.4
Main Southwest Miramichi River	7	29.1	9.3	-	18.8	12.8	4.1	17.1	19.2	38.1
	4	<1	17.1	40.7	11.7	24.7	22.7	14.6	32.5	41.3
	10	37.2	12.6	28.7	13.1	8.1	5.4	24.3	18.3	10.9
	14	29.2	32.1	-	51.1	19.6	12.4	3.5	5.2	2.2
	11	29.9	21.9	45.8	2.1	45.5	28.1	-	-	-
	6	9.5	22.8	27.3	13.4	12.0	52.3	-	12.5	48.4
	5	17.8	35.4	34.1	7.6	14.0	42.8	21.9	28.3	25.5
	13	79.6	31.6	43.9	19.7	30.5	52.1	72.1	19.7	42.4
	1	<1	22.5	34.4	12.9	50.1	39.0	34.7	26.8	3.5
	2	<1	1.8	2.5	6.4	3.3	2.4	-	5.3	1.2
	3	<1	17.0	21.3	4.9	30.8	10.2	11.8	10.9	21.1
	9	7.0	<1	7.5	17.3	8.0	16.5	-	15.8	1.4
12	19.0	3.7	<1	3.6	32.9	4.9	5.6	1.8	<1	
8	2.3	7.0	18.1	3.7	20.2	14.9	55.4	7.3	8.6	
Bartholomew River	1	5.9	11.6	9.1	8.5	6.8	-	-	-	-
	2	15.6	13.4	15.3	6.2	16.8	-	-	-	-
	3	2.9	-	-	-	-	-	-	-	-
	4	-	14.9	1.1	15.0	5.6	-	-	-	-
	6	-	-	-	-	22.6	-	-	-	-
	5	-	-	-	-	-	-	-	-	-
Morse Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	-	<1
Cains River	3	-	-	60.4	18.7	11.1	7.2	15.5	8.5	16.7
	4	-	15.7	27.2	11.9	14.5	23.6	13.5	34.2	19.1
	6	-	29.3	19.0	15.0	47.4	17.7	55.5	11.9	26.4
	7	-	28.9	-	-	-	-	-	-	-
	8	-	1.8	4.0	3.6	4.1	7.4	6.1	1.1	46.6
Big Hole Brook	1	1.5	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	6.1	12.1	29.6	20.8	14.4	25.0	34.4	10.9	7.9
Betts Mill Brook	1	3.1	<1	2.8	4.3	<1	<1	1.1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Burntland Brook	1	-	26.3	17.6	12.9	20.4	10.9	8.4	1.8	<1
	2	-	9.1	8.9	3.1	<1	13.1	-	3.6	<1
Taxis River	1	-	-	54.7	24.4	13.5	13.0	12.7	18.7	3.8
	2	-	-	75.1	15.4	40.1	33.8	23.1	26.6	7.6
	3	-	-	23.0	13.3	10.2	12.6	8.9	9.2	9.3
MacBean Brook	1	<1	<1	5.0	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	<1	<1	<1	<1	<1	<1	-	2.4	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	-	-	-	-	-	-	-
	4	-	8.2	<1	<1	<1	<1	4.5	<1	<1
Teague Brook	1	25.5	19.6	1.7	10.8	16.8	48.8	5.0	36.1	53.1
	2	<1	5.0	<1	3.4	1.1	4.4	3.4	5.7	8.7
Overall mean		14.1	18.5	20.3	14.9	15.1	18.8	15.6	14.2	15.3
Total number of estimates		36	45	44	49	52	48	40	45	46

TABLE 14. Calculated densities of chub, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	7.3	1.3	<1	<1	1.5	<1	<1	5.0
	2	-	<1	<1	<1	<1	4.0	108.4	68.7	26.7
Black River	1	-	6.1	7.6	<1	2.4	6.5	7.0	2.9	8.1
	2	-	58.0	40.2	<1	<1	<1	3.8	9.7	4.1
Napan River	1	-	11.4	<1	<1	<1	<1	14.8	<1	17.3
	2	-	21.2	<1	1.8	9.4	<1	8.0	9.5	15.6
Burnt Church River	1	-	<1	<1	<1	-	-	-	-	-
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Oyster River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	3.6	50.9	7.1	1.4	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	4	<1	2.2	2.2	<1	<1	<1	<1	<1	<1
	5	-	-	<1	<1	<1	<1	<1	<1	<1
	6	-	-	<1	<1	<1	<1	<1	<1	<1
Overall mean		0.8	10.7	4.0	0.6	1.2	1.2	9.8	6.4	5.4
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 15. Calculated densities of chub, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)									
		1970	1971	1972	1973	1974	1975	1976	1977	1978	
Tomogonops River	10	-	<1	-	<1	2.7	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	
Little River	3	-	<1	-	1.1	-	-	-	-	-	
	2	-	-	-	1.8	1.8	<1	<1	<1	<1	
	12	-	-	-	-	<1	<1	<1	<1	<1	
Portage River	1	-	-	<1	<1	<1	2.3	1.7	<1	<1	
	8	-	-	-	-	<1	<1	3.5	<1	<1	
Little Sevogle River	1	<1	<1	1.1	<1	<1	<1	2.5	2.4	<1	
	2	2.1	4.0	2.8	1.4	<1	3.2	<1	<1	<1	
	3	<1	<1	2.7	<1	3.4	1.6	5.2	3.9	3.1	
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1	
	3	-	<1	<1	<1	<1	<1	<1	<1	<1	
	4	-	<1	<1	<1	<1	<1	3.8	<1	<1	
	6	-	<1	<1	<1	<1	<1	<1	<1	<1	
Sutherland Brook	1	4.0	<1	3.0	1.7	<1	<1	<1	<1	<1	
Northwest Millstream	1	<1	<1	<1	<1	<1	-	-	-	-	
	2	1.8	1.6	<1	2.9	<1	-	-	-	-	
	3	<1	1.3	<1	<1	<1	-	-	-	-	
Big Sevogle River	1	-	-	-	-	<1	<1	<1	<1	<1	
	2	-	-	-	-	<1	<1	<1	<1	<1	
	3	-	-	-	-	<1	<1	<1	<1	<1	
Northwest Miramichi River	2	-	-	-	-	-	1.9	<1	<1	<1	
	3	-	-	-	-	<1	-	-	-	-	
	4	-	-	-	-	<1	<1	<1	<1	1.4	
	5	-	-	-	-	<1	<1	<1	<1	<1	
	7	-	-	-	-	<1	<1	<1	<1	<1	
	9A	-	-	-	-	1.5	1.1	<1	<1	<1	
	9B	-	-	-	-	<1	<1	<1	<1	<1	
	13	-	-	-	-	<1	<1	<1	<1	<1	
	14	-	-	-	-	1.4	-	-	-	-	
	15	-	-	-	-	<1	<1	<1	<1	<1	
	17	-	-	-	-	<1	<1	-	<1	<1	
	18	-	-	-	-	<1	<1	<1	<1	<1	
	19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		1.4	0.9	1.1	0.9	0.8	0.8	1.1	0.7	0.6	
Total number of estimates		7	13	12	15	31	26	25	26	26	

TABLE 16. Calculated densities of chub, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	2.8	-	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Barnaby River	1	-	2.6	<1	<1	7.1	<1	<1	<1	<1
	2	-	1.1	<1	<1	<1	11.7	4.4	4.4	8.1
Renous River	1	<1	<1	-	<1	-	-	-	-	-
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	1.9	<1	1.4	<1	<1	<1	<1
	4	<1	-	-	-	-	-	-	-	-
	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	-	<1	<1	<1	-	-	-
	7	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	<1	<1	<1	<1	1.9	<1
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	<1	5.9	<1
	4	<1	<1	<1	<1	<1	<1	<1	2.6	<1
	10	<1	<1	<1	<1	<1	<1	2.0	17.3	19.4
	14	<1	<1	-	<1	2.8	1.9	<1	<1	<1
	11	<1	<1	<1	<1	<1	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	1.8	<1
	5	<1	2.4	<1	<1	<1	<1	<1	<1	<1
	13	<1	<1	<1	<1	1.5	<1	4.3	<1	<1
Bartholomew River	1	<1	<1	<1	<1	<1	2.1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9	<1	<1	<1	<1	<1	<1	-	<1	<1
	12	<1	<1	<1	<1	<1	<1	<1	<1	<1
	8	<1	<1	<1	<1	<1	<1	3.0	<1	<1
	1	<1	<1	<1	<1	<1	-	-	-	-
	2	<1	<1	<1	<1	<1	-	-	-	-
Morse Brook	3	1.6	-	-	-	-	-	-	-	-
	4	-	3.4	<1	5.0	4.6	-	-	-	-
	6	-	-	-	-	<1	-	-	-	-
	1	<1	<1	<1	3.3	<1	<1	<1	<1	<1
Cains River	2	<1	<1	1.4	6.8	<1	<1	<1	-	<1
	3	-	-	<1	<1	1.8	<1	<1	<1	<1
Big Hole Brook	4	-	<1	1.0	<1	<1	<1	1.8	<1	<1
	6	-	<1	<1	<1	<1	<1	2.1	<1	<1
	7	-	<1	-	-	-	-	-	-	-
	8	-	<1	<1	2.6	<1	<1	<1	<1	<1
Betts Mill Brook	1	<1	4.5	1.3	2.4	<1	<1	<1	<1	<1
	2	<1	<1	5.1	<1	<1	<1	1.1	<1	3.2
	3	1.1	<1	2.7	<1	2.4	<1	<1	<1	<1
Burntland Brook	1	-	<1	<1	<1	<1	<1	<1	1.1	<1
	2	-	2.6	7.9	<1	<1	1.1	-	<1	<1
Taxis River	1	-	-	<1	<1	<1	<1	<1	<1	<1
	2	-	-	<1	<1	<1	<1	<1	<1	1.2
	3	-	-	2.5	<1	<1	<1	<1	<1	<1
MacBean Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Overall mean		0.5	0.8	0.9	0.8	0.8	0.8	0.9	1.2	1.1
Total number of estimates		36	45	44	49	52	48	38	45	46

TABLE 17. Calculated densities of shiner, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	13.8	3.6	20.5	3.6	<1	<1	1.3	<1
	2	-	72.9	35.5	23.1	2.0	<1	13.0	64.3	7.9
Black River	1	-	8.2	1.4	20.8	7.9	2.0	37.6	33.1	85.9
	2	-	56.6	43.2	37.3	29.4	7.2	46.1	5.9	<1
Napan River	1	-	63.8	79.0	9.2	<1	<1	<1	1.2	30.4
	2	-	112.5	6.3	13.4	18.6	173.1	5.6	4.5	40.6
Burnt Church River	1	-	0	0	0	-	-	-	-	-
	2	-	0	0	0	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Oyster River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	1.2	<1	<1	<1	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	4	<1	12.6	<1	<1	<1	<1	<1	<1	<1
	6	-	-	<1	<1	<1	<1	<1	<1	<1
Overall mean		0.6	22.9	10.8	8.0	4.4	12.5	7.1	7.6	11.3
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 18. Calculated densities of shiner, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	4.2	-	2.3	<1	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	<1	-	<1	-	-	-	-	-
	2	-	-	-	<1	<1	<1	<1	<1	<1
	12	-	-	-	-	<1	<1	<1	<1	<1
Portage River	1	-	-	11.9	19.0	1.6	5.4	9.3	<1	3.0
	8	-	-	-	-	<1	<1	2.5	<1	11.7
Little Sevogle River	1	16.3	<1	<1	12.3	<1	<1	<1	<1	<1
	2	31.5	3.4	<1	3.3	<1	<1	<1	<1	<1
	3	77.3	5.6	<1	5.0	<1	<1	<1	<1	<1
Little Southwest Miramichi River	1	-	6.5	<1	<1	<1	<1	6.0	<1	3.9
	3	-	<1	<1	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	2.7	<1	55.6	<1	<1	<1	<1	1.4
Sutherland Brook	1	0	0	0	0	0	0	0	0	0
Northwest Millstream	1	14.6	6.5	3.6	16.7	<1	-	-	-	-
	2	<1	<1	<1	<1	<1	-	-	-	-
	3	4.1	<1	<1	<1	<1	-	-	-	-
Big Sevogle River	1	-	-	-	-	0	0	0	0	0
	2	-	-	-	-	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	3.4	13.0
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	5.0	<1	<1	2.5	<1
	5	-	-	-	-	<1	<1	<1	<1	<1
	7	-	-	-	-	<1	<1	<1	<1	<1
	9A	-	-	-	-	5.0	2.1	1.3	<1	<1
	9B	-	-	-	-	2.1	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	<1	<1	<1
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		20.6	2.5	1.7	7.9	0.8	0.7	1.1	0.6	1.6
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 19. Calculated densities of shiner, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Streams	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	2.3	-	<1	<1
	2	-	-	-	-	<1	<1	3.0	<1	<1
	3	-	-	-	-	<1	1.0	1.3	<1	<1
Barnaby River	1	-	113.1	25.5	39.2	21.0	79.1	5.7	58.2	76.4
	2	-	25.2	18.3	3.6	4.2	<1	<1	<1	<1
Renous River	1	25.9	2.6	-	2.3	-	-	-	-	-
	2	34.4	1.8	12.8	1.5	<1	1.5	2.6	<1	<1
	3	56.5	10.4	8.9	3.6	<1	9.5	<1	3.3	<1
	4	4.2	-	-	-	-	-	-	-	-
	5	29.5	9.6	1.6	<1	<1	<1	<1	<1	<1
	6	-	4.7	-	4.7	2.7	7.8	-	-	-
	7	-	-	2.7	1.4	<1	<1	<1	<1	<1
	8	-	-	-	<1	2.0	<1	<1	<1	<1
Main Southwest Miramichi River	7	125.8	50.7	-	129.8	27.5	3.2	13.8	41.7	9.4
	4	38.2	37.0	155.1	13.2	11.0	5.1	46.6	4.6	28.5
	10	103.3	67.7	55.0	24.0	13.8	8.0	18.5	14.5	2.8
	14	39.4	20.5	-	17.8	22.3	9.7	<1	2.1	2.3
	11	93.0	10.3	29.0	8.3	30.4	8.5	-	-	-
	6	2.8	<1	2.8	6.8	1.8	54.2	-	3.4	<1
	5	81.1	19.6	34.4	10.4	12.6	5.0	11.0	1.0	6.7
	13	16.7	9.4	23.6	6.1	2.7	48.2	1.0	6.1	8.0
	1	3.9	<1	1.6	<1	4.3	<1	<1	<1	<1
	2	17.1	<1	<1	<1	<1	<1	-	<1	<1
	3	<1	<1	1.5	<1	<1	<1	<1	<1	<1
Bartholomew River	9	<1	2.0	<1	<1	<1	1.7	-	<1	<1
	12	4.7	<1	1.6	<1	<1	2.0	<1	<1	<1
	8	1.3	<1	<1	<1	<1	<1	9.8	<1	<1
	1	16.8	1.3	<1	1.1	7.4	-	-	-	-
	2	35.8	22.7	<1	<1	1.8	-	-	-	-
Morse Brook	3	24.3	-	-	-	-	-	-	-	-
	4	-	21.7	<1	24.7	10.2	-	-	-	-
	6	-	-	-	-	<1	-	-	-	-
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	Cains River	3	-	-	28.5	10.9	1.6	7.3	1.5	1.3
4		-	29.5	68.3	8.4	23.2	16.5	22.9	4.3	14.8
6		-	111.9	14.4	28.2	25.6	21.2	26.0	<1	2.9
7		-	8.8	-	-	-	-	-	-	-
8		-	<1	<1	<1	<1	<1	<1	<1	<1
Big Hole Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	13.8	<1	<1	<1	<1	1.5	<1	<1
Betts Mill Brook	1	<1	<1	<1	<1	<1	<1	2.4	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Burntland Brook	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	<1	<1	<1	<1	<1	-	<1	<1
Taxis River	1	-	-	2.2	<1	<1	<1	<1	2.4	<1
	2	-	-	10.4	1.4	<1	<1	<1	<1	<1
	3	-	-	<1	<1	<1	<1	2.9	<1	<1
MacBean Brook	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
Overall mean		21.1	13.4	11.5	7.3	4.6	6.3	4.5	3.5	4.3
Total number of estimates		36	45	44	49	52	48	40	45	44

TABLE 20. Calculated densities of sucker, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	16.9	5.1	2.4	<1	<1	<1	<1	1.8
	2	-	18.8	11.8	3.3	<1	<1	<1	2.9	9.0
Black River	1	-	51.9	21.9	9.9	1.1	<1	3.2	21.9	18.1
	2	-	105.0	25.1	5.3	11.0	3.6	85.5	10.7	3.1
Napan River	1	-	1246.9	14.6	12.9	<1	10.7	<1	15.3	14.9
	2	-	36.3	7.2	4.0	4.0	68.4	<1	1.6	3.0
Burnt Church River	1	-	0	0	0	-	-	-	-	-
	2	-	0	0	0	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Oyster River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	3.9	1.0	<1	-	-	-	-	-
Bartibog River	1	<1	2.1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	1.9	<1	2.2	<1	<1	<1	<1	<1	<1
	4	<1	6.4	<1	<1	<1	<1	<1	<1	<1
	6	-	-	2.6	<1	<1	<1	<1	<1	<1
Overall mean		0.7	99.4	5.9	2.6	1.4	5.9	6.3	3.8	3.6
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 21. Calculated densities of sucker, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	2.4	-	<1	1.6	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	0	-	0	-	-	-	-	-
	2	-	-	-	0	0	0	0	0	0
	12	-	-	-	-	0	0	0	0	0
Portage River	1	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	-	<1	<1	<1	<1	1.1
Little Sevogle River	1	3.6	<1	<1	1.6	<1	<1	<1	<1	<1
	2	12.3	<1	<1	1.0	<1	<1	<1	<1	<1
	3	1.7	<1	1.6	2.3	<1	1.0	<1	<1	<1
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	<1	<1	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
Sutherland Brook	1	2.9	<1	2.7	<1	<1	<1	2.3	<1	<1
Northwest Millstream	1	<1	7.3	14.3	1.8	<1	-	-	-	-
	2	5.0	1.3	<1	7.7	1.2	-	-	-	-
	3	<1	<1	<1	<1	1.2	-	-	-	-
Big Sevogle River	1	-	-	-	-	<1	<1	<1	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	<1	<1
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	<1	<1	1.5	<1	<1
	5	-	-	-	-	1.6	<1	<1	4.0	<1
	7	-	-	-	-	1.2	<1	<1	1.0	<1
	9A	-	-	-	-	<1	3.8	2.9	<1	<1
	9B	-	-	-	-	<1	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	-	<1	<1
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		3.8	1.2	1.9	1.2	0.6	0.6	0.7	0.6	0.5
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 22. Calculated densities of sucker, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	<1	-	<1	<1
	2	-	-	-	-	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Barnaby River	1	-	<1	4.0	1.2	1.4	1.3	<1	2.1	<1
	2	-	20.7	15.7	2.5	1.3	<1	<1	<1	1.5
Renous River	1	1.4	<1	-	<1	-	-	-	-	-
	2	107.1	<1	<1	<1	<1	<1	<1	<1	<1
	3	1.3	<1	1.8	3.8	<1	<1	<1	<1	<1
	4	1.2	-	-	-	-	-	-	-	-
	5	3.5	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	2.7	-	2.1	<1	2.3	-	-	-
	7	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	<1	<1	<1	<1	<1	<1
Main Southwest Miramichi River	7	8.4	<1	-	1.1	4.1	<1	<1	<1	<1
	4	8.6	7.0	2.0	<1	<1	<1	<1	<1	<1
	10	10.0	3.5	1.1	4.0	<1	<1	21.2	1.5	<1
	14	5.1	<1	-	<1	<1	<1	<1	<1	<1
	11	2.3	<1	<1	<1	1.9	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	<1	<1
	5	<1	2.4	<1	2.2	<1	<1	<1	<1	<1
	13	4.7	2.4	2.3	1.6	<1	3.0	2.4	<1	<1
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
9	<1	<1	<1	<1	<1	<1	-	<1	<1	
12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
8	<1	<1	<1	<1	<1	<1	<1	<1	1.0	
Bartholomew River	1	2.8	<1	<1	<1	16.1	-	-	-	-
	2	<1	3.8	2.4	<1	<1	-	-	-	-
	3	<1	-	-	-	-	-	-	-	-
	4	-	7.2	<1	6.9	1.8	-	-	-	-
	6	-	-	-	-	<1	-	-	-	-
	Morse Brook	1	<1	<1	<1	<1	<1	<1	<1	<1
2	<1	<1	<1	<1	<1	<1	<1	-	<1	
Cains River	3	-	-	1.6	<1	<1	<1	<1	1.1	<1
	4	-	<1	1.0	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	2.6	2.9	<1	<1	<1	<1
	7	-	1.6	-	-	-	-	-	-	-
	8	-	<1	<1	<1	<1	<1	1.6	<1	<1
Big Hole Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	12.5	5.4	6.1	6.3	<1	<1	<1	3.1	<1
Betts Mill Brook	1	<1	<1	<1	1.3	<1	<1	3.0	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Burntland Brook	1	-	<1	<1	<1	<1	<1	<1	2.7	<1
	2	-	<1	<1	<1	<1	<1	-	1.1	<1
Taxis River	1	-	-	<1	<1	<1	<1	<1	<1	<1
	2	-	-	<1	<1	1.2	<1	<1	2.1	<1
	3	-	-	<1	<1	<1	<1	3.2	<1	<1
MacBean Brook	1	<1	<1	3.2	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
Overall mean		4.9	1.6	1.3	1.1	1.0	0.6	1.3	0.7	0.5
Total number of estimates		36	45	44	49	52	48	36	45	46

TABLE 23. Calculated densities of stickleback, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Main Miramichi streams.

Streams	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	1.3	<1	<1	<1	<1	<1	<1	<1
	2	-	4.6	4.0	1.6	1.5	<1	<1	<1	<1
Black River	1	-	5.4	1.0	2.0	<1	<1	<1	<1	<1
	2	-	12.8	16.2	1.6	2.7	1.3	<1	<1	<1
Napan River	1	-	11.0	33.4	2.0	16.2	<1	<1	<1	<1
	2	-	<1	<1	<1	<1	<1	<1	<1	<1
Burnt Church River	1	-	5.5	8.3	2.0	-	-	-	-	-
	2	-	1.2	<1	<1	<1	<1	<1	<1	<1
	3	-	-	-	-	<1	34.2	81.7	26.4	<1
Oyster River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	4.4	<1	<1	<1	<1	<1	<1
	3	8.3	<1	<1	<1	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	<1	<1	14.2	<1	<1
	2	87.8	26.7	12.9	7.2	20.1	35.0	<1	251.9	3.2
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	-	<1	<1	<1	<1	<1	<1	<1
Overall mean		14.1	4.8	5.3	1.3	3.1	5.1	6.8	19.0	0.7
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 24. Calculated densities of stickleback, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	0	-	0	0	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	<1	-	<1	-	-	-	-	-
	2	-	-	-	<1	<1	<1	<1	<1	<1
	12	-	-	-	-	<1	<1	<1	<1	<1
Portage River	1	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	-	7.3	1.3	3.7	<1	14.7
Little Sevogle River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	2.0	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Little Southwest Miramichi River	1	-	0	0	0	0	0	0	0	0
	3	-	0	0	0	0	0	0	0	0
	4	-	0	0	0	0	0	0	0	0
	6	-	0	0	0	0	0	0	0	0
Sutherland Brook	1	0	0	0	0	0	0	0	0	0
Northwest Millstream	1	<1	15.2	<1	<1	<1	-	-	-	-
	2	<1	<1	<1	<1	<1	-	-	-	-
	3	<1	1.5	1.0	<1	<1	-	-	-	-
Big Sevogle River	1	-	-	-	-	0	0	0	0	0
	2	-	-	-	-	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	<1	<1
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	<1	<1	<1	<1	<1
	5	-	-	-	-	<1	<1	<1	<1	<1
	7	-	-	-	-	<1	<1	<1	<1	<1
	9A	-	-	-	-	<1	<1	<1	<1	<1
	9B	-	-	-	-	<1	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	-	<1	<1
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		0.6	1.5	0.3	0.3	0.6	0.4	0.5	0.4	0.9
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 25. Calculated densities of stickleback, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	<1	<1	-	<1	<1
	2	-	-	-	-	<1	<1	<1	1.1	<1
	3	-	-	-	-	<1	<1	<1	<1	<1
Barnaby River	1	-	1.5	<1	<1	<1	<1	<1	<1	1.2
	2	-	8.4	1.4	<1	<1	<1	<1	1.2	<1
Renous River	1	<1	2.0	-	<1	-	-	-	-	-
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	<1	<1	<1	3.3	1.4	<1	<1	<1	<1
	4	<1	-	-	-	-	-	-	-	-
	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	-	<1	<1	<1	-	-	-
	7	-	-	<1	<1	<1	<1	<1	<1	<1
	8	-	-	-	<1	<1	<1	<1	<1	<1
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	<1	<1	<1
	4	<1	2.8	<1	<1	<1	<1	<1	<1	<1
	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	14	<1	<1	-	<1	<1	<1	<1	<1	<1
	11	2.1	<1	3.5	<1	<1	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	<1	<1
	5	10.1	1.5	2.3	1.1	<1	<1	<1	<1	<1
	13	2.4	<1	<1	1.3	1.8	1.2	1.0	2.7	<1
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	-	<1	<1
Bartholomew River	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9	<1	<1	<1	<1	<1	<1	-	<1	<1
	12	<1	<1	<1	<1	<1	<1	<1	<1	<1
	8	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1	<1	<1	<1	<1	<1	-	-	-	-
	2	9.2	5.4	<1	<1	<1	-	-	-	-
	3	<1	-	-	-	-	-	-	-	-
	4	-	<1	<1	5.7	7.9	-	-	-	-
Morse Brook	6	-	-	-	-	<1	-	-	-	-
	1	0	0	0	0	0	0	0	0	0
Cains River	2	0	0	0	0	0	0	0	0	0
	3	<1	-	-	-	-	-	-	-	-
Big Hole Brook	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
	7	-	<1	-	-	-	-	-	-	-
	8	-	<1	<1	<1	<1	<1	<1	<1	<1
Betts Mill Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3	7.0	6.8	<1	1.1	<1	<1	<1	<1	<1
Burntland Brook	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
Taxis River	1	-	0	0	0	0	0	0	0	0
	2	-	0	0	0	0	0	0	0	0
	3	-	0	0	0	0	0	0	0	0
MacBean Brook	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
Overall mean		1.2	0.9	0.5	0.6	0.6	0.4	0.4	0.5	0.4
Total number of estimates		36	45	44	49	52	48	40	45	46

TABLE 26. Calculated densities of sculpin, as determined by electroseining in the Miramichi River system, 1970-78, sampling sites on Main Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Baie du Vin River	1	-	0	0	0	0	0	0	0	0
	2	-	0	0	0	0	0	0	0	0
Black River	1	-	0	0	0	0	0	0	0	0
	2	-	0	0	0	0	0	0	0	0
Napan River	1	-	0	0	0	0	0	0	0	0
	2	-	0	0	0	0	0	0	0	0
Burnt Church River	1	-	<1	3.2	2.0	-	-	-	-	-
	2	-	17.8	22.0	9.5	43.0	34.6	64.6	33.7	31.7
	3	-	-	-	-	31.0	39.0	25.9	17.5	19.8
Oyster River	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	-	-	-	-	-
Bartibog River	1	<1	<1	<1	<1	2.1	<1	<1	<1	4.4
	2	<1	<1	1.6	<1	<1	2.7	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	3.0
	4	4.5	5.1	4.1	8.6	2.8	8.6	9.8	5.6	8.6
	5	-	-	<1	<1	<1	1.4	6.3	2.3	4.7
	6	-	-	<1	<1	<1	1.4	6.3	2.3	4.7
Overall mean		0.9	1.7	2.0	1.4	5.4	5.8	7.2	4.0	4.9
Total number of estimates		7	15	16	16	15	15	15	15	15

TABLE 27. Calculated densities of sculpin, as determined by electroseining in the Miramichi River system, 1970-78; sampling sites on Northwest Miramichi streams.

Streams	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Tomogonops River	10	-	0	-	0	0	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
Little River	3	-	<1	-	<1	-	-	-	-	-
	2	-	-	-	8.9	4.2	9.2	14.8	7.6	7.6
	12	-	-	-	-	<1	<1	<1	<1	<1
Portage River	1	-	-	0	0	0	0	0	0	0
	8	-	-	-	-	0	0	0	0	0
Little Sevogle River	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	<1	1.2	<1	<1	1.4	<1	<1	<1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Little Southwest Miramichi River	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	3	-	<1	<1	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
Sutherland Brook	1	200.5	569.3	73.0	56.2	95.9	18.1	73.8	70.1	90.6
Northwest Millstream	1	<1	<1	<1	<1	<1	-	-	-	-
	2	<1	1.3	<1	<1	<1	-	-	-	-
	3	<1	1.5	1.1	<1	<1	-	-	-	-
Big Sevogle River	1	-	-	-	-	0	0	0	0	0
	2	-	-	-	-	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Northwest Miramichi River	2	-	-	-	-	-	<1	<1	<1	<1
	3	-	-	-	-	<1	-	-	-	-
	4	-	-	-	-	<1	<1	<1	<1	<1
	5	-	-	-	-	<1	<1	<1	<1	<1
	7	-	-	-	-	<1	<1	<1	<1	<1
	9A	-	-	-	-	<1	<1	<1	<1	<1
	9B	-	-	-	-	<1	<1	<1	<1	<1
	13	-	-	-	-	<1	<1	<1	<1	<1
	14	-	-	-	-	<1	-	-	-	-
	15	-	-	-	-	<1	<1	<1	<1	<1
	17	-	-	-	-	<1	<1	-	<1	<1
18	-	-	-	-	<1	<1	<1	<1	<1	
19	-	-	-	-	<1	<1	<1	<1	<1	
Overall mean		29.1	44.4	6.6	4.7	3.6	1.5	3.9	3.4	4.1
Total number of estimates		7	13	12	15	31	26	25	26	26

TABLE 28. Calculated densities of sculpin, as determined by electroseining in the Miramichi River system, 1970-78, sampling sites on Southwest Miramichi streams.

Stream	Site number	Density per 100 yd ² (83.6 m ²)								
		1970	1971	1972	1973	1974	1975	1976	1977	1978
Dungarvon River	1	-	-	-	-	0	0	-	0	0
	2	-	-	-	-	0	0	0	0	0
	3	-	-	-	-	0	0	0	0	0
Barnaby River	1	-	0	0	0	0	0	0	0	0
	2	-	0	0	0	0	0	0	0	0
Renous River	1	0	0	-	0	-	-	-	-	-
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	-	-	-	-	-	-	-	-
	5	0	0	0	0	0	0	0	0	0
	6	-	0	-	0	0	0	-	-	-
	7	-	-	0	0	0	0	0	0	0
	8	-	-	-	0	0	0	0	0	0
Main Southwest Miramichi River	7	<1	<1	-	<1	<1	<1	<1	<1	<1
	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
	14	<1	<1	-	<1	<1	<1	<1	<1	<1
	11	<1	<1	<1	<1	<1	<1	-	-	-
	6	<1	<1	<1	<1	<1	<1	-	<1	<1
	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
	13	<1	<1	<1	<1	<1	<1	<1	<1	<1
	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2	<1	3.6	<1	<1	<1	6.5	-	3.2	4.1
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9	<1	<1	<1	<1	<1	<1	-	<1	<1
12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
8	<1	<1	<1	1.1	2.3	6.3	1.0	2.0	1.7	
Bartholomew River	1	1.1	<1	5.5	18.9	10.9	-	-	-	-
	2	<1	1.1	<1	<1	<1	-	-	-	-
	3	<1	-	-	-	-	-	-	-	-
	4	-	<1	<1	<1	<1	-	-	-	-
	6	-	-	-	-	2.0	-	-	-	-
Morse Brook	1	<1	28.0	12.5	33.7	10.6	21.5	15.4	20.5	17.1
	2	117.1	61.2	3.1	26.5	6.0	26.0	19.8	-	21.6
Cains River	3	-	-	<1	<1	<1	<1	<1	<1	<1
	4	-	<1	<1	<1	<1	<1	<1	<1	<1
	6	-	<1	<1	<1	<1	<1	<1	<1	<1
	7	-	1.2	-	-	-	-	-	-	-
	8	-	3.9	6.4	3.7	9.3	22.6	7.1	9.2	4.6
Big Hole Brook	1	70.5	192.3	58.6	63.0	63.8	56.4	92.2	57.9	98.4
	2	218.6	124.9	58.4	89.9	89.9	93.2	84.6	39.7	34.2
	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Betts Mill Brook	1	132.1	40.6	56.5	100.4	75.4	63.3	56.6	61.4	114.0
	2	105.7	85.7	96.5	144.2	119.3	110.2	116.6	184.7	105.3
Burntland Brook	1	-	<1	<1	<1	<1	<1	<1	<1	<1
	2	-	3.7	7.2	3.6	2.6	33.4	-	<1	3.1
Taxis River	1	-	-	0	0	0	0	0	0	0
	2	-	-	0	0	0	0	0	0	0
	3	-	-	0	0	0	0	0	0	0
MacBean Brook	1	36.8	75.7	37.6	14.5	13.3	37.9	23.8	17.2	7.9
	2	18.7	16.5	8.7	4.7	4.3	11.8	9.4	21.8	27.0
Rocky Brook	1	0	0	0	0	0	0	-	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	-	-	-	-	-	-	-
	4	-	0	0	0	0	0	0	0	0
Teague Brook	1	3.2	6.5	1.0	3.6	8.8	52.0	14.1	44.6	30.9
	2	29.8	38.6	48.1	64.5	52.7	47.1	17.1	32.3	31.3
Overall mean		20.6	15.4	9.3	11.9	9.3	12.4	11.6	11.2	11.1
Total number of estimates		36	45	44	49	52	48	40	45	46

TABLE 29. Calculated overall mean densities of other species per 100 yd² (83.6 m²), as determined by electroseining in the Miramichi River system, 1970-78. (n = number of estimates.)

Year	Lamprey			American eel			Brook trout		
	n	Range	Mean	n	Range	Mean	n	Range	Mean
1970	50	<1-54.7	2.5	50	<1-3.9	0.6	50	<1-80.0	9.1
1971	73	<1-66.2	3.2	73	<1-20.5	1.6	73	<1-83.9	8.3
1972	72	<1-23.4	2.6	72	<1-25.7	1.7	72	<1-53.3	5.8
1973	80	<1-71.3	1.9	80	<1-28.8	1.4	80	<1-52.1	4.6
1974	98	<1-16.4	1.2	98	<1-20.6	1.2	98	<1-49.9	3.5
1975	89	<1-83.3	1.9	89	<1-15.6	1.2	89	<1-45.5	4.0
1976	80	<1-177.7	4.3	80	<1-14.1	1.3	80	<1-47.7	3.8
1977	86	<1-41.5	2.0	86	<1-15.4	1.1	86	<1-358.3	8.0
1978	87	<1-100.6	2.1	87	<1-7.2	0.8	87	<1-20.3	2.7
Overall	715	<1-177.7	2.4	715	<1-28.8	1.2	715	<1-358.3	5.3

Year	Dace			Chub			Shiner		
	n	Range	Mean	n	Range	Mean	n	Range	Mean
1970	50	<1-106.2	15.7	50	<1-4.0	0.7	50	<1-125.8	18.1
1971	73	<1-213.4	25.2	73	<1-58.0	2.8	73	<1-113.1	13.4
1972	72	<1-116.7	22.6	72	<1-40.2	1.6	72	<1-155.1	9.7
1973	80	<1-91.7	14.4	80	<1-6.8	0.8	80	<1-129.8	7.5
1974	98	<1-90.4	13.8	98	<1-9.4	0.9	98	<1-30.4	3.4
1975	89	<1-151.0	17.4	89	<1-11.7	0.9	89	<1-173.1	5.7
1976	80	<1-86.4	15.1	80	<1-108.4	2.6	80	<1-46.6	3.9
1977	86	<1-100.3	12.6	86	<1-68.7	1.9	86	<1-64.3	3.3
1978	87	<1-107.3	15.0	87	<1-26.7	1.7	87	<1-85.9	4.6
Overall	715	<1-213.4	16.6	715	<1-108.4	1.6	715	<1-173.1	7.0

Year	Sucker			Stickleback			Sculpin		
	n	Range	Mean	n	Range	Mean	n	Range	Mean
1970	50	<1-107.1	4.2	50	<1-87.8	2.9	50	<1-218.6	19.0
1971	73	<1-1246.9	21.6	73	<1-26.7	1.8	73	<1-569.3	17.7
1972	72	<1-25.1	2.4	72	<1-33.4	1.5	72	<1-96.5	7.2
1973	80	<1-12.9	1.4	80	<1-7.2	0.7	80	<1-144.2	8.4
1974	98	<1-16.1	0.9	98	<1-20.1	1.0	98	<1-119.3	6.9
1975	89	<1-68.4	1.5	89	<1-35.0	1.2	89	<1-110.2	8.1
1976	80	<1-85.5	2.0	80	<1-81.7	1.6	80	<1-116.6	8.4
1977	86	<1-21.9	1.2	86	<1-251.9	3.7	86	<1-184.7	7.6
1978	87	<1-18.1	1.0	87	<1-14.7	0.6	87	<1-114.0	7.9
Overall	715	<1-1246.9	3.7	715	<1-251.9	1.6	715	<1-569.3	9.6

TABLE 30. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1970.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	-	-	-
	2	-	-	-
Black River	1	-	-	-
	2	-	-	-
Napan River	1	-	-	-
	2	-	-	-
Burnt Church River	1	-	-	-
	2	-	-	-
	3	-	-	-
Oyster River	1	127	31.0	9.4
	2	214	18.3	8.9
	3	146	33.0	11.7
Bartibog River	1	323	42.9	14.4
	2	385	33.3	14.4
	3	318	41.2	13.3
	4	326	54.4	14.4
	6	-	-	-
Overall mean		263	36.3	12.4
Total number of estimates		7	7	7

TABLE 31. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1971.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	331	15.8	15.0
	2	297	20.3	18.9
Black River	1	261	15.5	14.4
	2	334	34.5	17.8
Napan River	1	353	26.9	17.0
	2	174	12.2	20.0
Burnt Church River	1	288	21.3	15.6
	2	351	29.5	16.7
	3	-	-	-
Oyster River	1	114	17.8	15.0
	2	150	7.5	10.0
	3	134	23.1	8.9
Bartibog River	1	354	29.5	19.4
	2	339	32.5	14.4
	3	324	36.3	17.8
	4	276	31.2	14.0
	6	-	-	-
Overall mean		272	23.6	15.7
Total number of estimates		15	15	15

TABLE 32. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1972.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	354	20.8	12.2
	2	383	22.9	13.3
Black River	1	355	23.6	14.4
	2	388	49.3	17.8
Napan River	1	353	34.8	12.2
	2	329	15.5	15.0
Burnt Church River	1	333	27.4	12.8
	2	398	28.7	12.2
	3	-	-	-
Oyster River	1	115	23.9	18.3
	2	204	18.3	12.2
	3	168	40.4	10.6
Bartibog River	1	297	46.2	19.4
	2	409	32.2	15.6
	3	290	36.4	15.6
	4	364	38.9	-
	6	347	42.7	14.4
Overall mean		318	31.4	14.4
Total number of estimates		16	16	15

TABLE 33. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1973.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	366	17.3	14.4
	2	360	24.4	17.8
Black River	1	296	16.3	18.9
	2	315	38.1	20.0
Napan River	1	279	14.7	16.7
	2	334	11.9	20.0
Burnt Church River	1	300	25.7	13.3
	2	248	31.2	10.0
	3	-	-	-
Oyster River	1	125	23.9	13.3
	2	220	14.7	12.2
	3	235	26.9	13.3
Bartibog River	1	326	30.0	18.9
	2	366	27.4	14.4
	3	288	35.8	13.9
	4	362	36.1	17.2
	6	398	31.2	16.7
Overall mean		307	25.4	15.7
Total number of estimates		16	16	16

TABLE 34. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1974.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	353	24.8	18.9
	2	340	31.8	20.6
Black River	1	358	29.4	10.7
	2	338	51.2	17.2
Napan River	1	268	25.3	15.6
	2	366	12.7	21.1
Burnt Church River	1	323	26.5	15.6
	2	-	-	-
	3	356	19.6	17.8
Oyster River	1	124	23.7	12.8
	2	243	30.1	13.3
	3	-	-	-
Bartibog River	1	316	25.7	14.4
	2	375	20.3	12.8
	3	303	29.4	14.4
	4	408	35.0	13.3
	6	366	24.1	16.1
Overall mean		323	27.3	15.6
Total number of estimates		15	15	15

TABLE 35. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1975.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	295	15.0	23.3
	2	306	29.7	23.3
Black River	1	337	13.5	18.9
	2	329	28.9	20.0
Napan River	1	270	19.3	9.4
	2	290	10.9	15.0
Burnt Church River	1	-	-	-
	2	313	25.7	20.0
	3	376	25.2	15.0
Oyster River	1	122	15.5	10.0
	2	142	11.2	9.4
	3	-	-	-
Bartibog River	1	332	27.7	21.1
	2	355	27.4	16.1
	3	271	21.3	24.0
	4	389	32.5	16.0
	6	373	24.6	14.4
Overall mean		300	23.7	17.1
Total number of estimates		15	15	15

TABLE 36. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1976.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	376	31.5	15.0
	2	310	29.0	16.7
Black River	1	385	25.2	14.4
	2	337	28.5	19.0
Napan River	1	274	19.8	14.4
	2	315	17.5	14.4
Burnt Church River	1	-	-	-
	2	310	32.3	17.8
	3	372	23.9	16.0
Oyster River	1	129	18.8	16.7
	2	154	14.4	11.1
	3	-	-	-
Bartibog River	1	354	11.7	15.6
	2	339	29.0	17.8
	3	278	23.9	14.0
	4	343	22.9	18.0
	6	333	28.5	15.6
Overall mean		307	23.8	15.8
Total number of estimates		15	15	15

TABLE 37. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1977.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	367	17.8	16.7
	2	372	33.8	21.1
Black River	1	379	16.8	12.2
	2	305	13.0	12.0
Napan River	1	293	16.3	16.7
	2	318	15.0	21.1
Burnt Church River	1	-	-	-
	2	432	30.0	11.1
	3	356	27.4	15.0
Oyster River	1	127	18.3	20.0
	2	157	14.2	14.0
	3	-	-	-
Bartibog River	1	337	37.3	13.3
	2	392	31.2	14.4
	3	288	31.5	12.5
	4	376	29.5	12.5
	6	490	35.6	11.1
Overall mean		333	24.5	14.9
Total number of estimates		15	15	15

TABLE 38. Summary of miscellaneous data on the sites electrofished on Main Miramichi streams in 1978.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Bay du Vin River	1	328	11.0	16.7
	2	364	26.5	18.9
Black River	1	381	13.3	15.6
	2	311	15.4	16.0
Napan River	1	274	16.1	17.8
	2	334	16.9	15.6
Burnt Church River	1	-	-	-
	2	461	23.4	14.4
	3	357	22.6	13.9
Oyster River	1	130	15.5	16.7
	2	146	11.9	16.7
	3	-	-	-
Bartibog River	1	348	36.3	16.1
	2	374	48.8	15.6
	3	304	33.3	13.3
	4	379	30.2	22.0
	6	510	30.2	15.0
Overall mean		333	23.4	16.3
Total number of estimates		15	15	15

TABLE 39. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1970.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	-	-	-
	12	-	-	-
Portage River	1	-	-	-
	8	-	-	-
Little Sevogle River	1	344	27.4	18.9
	2	325	39.1	20.0
	3	378	31.5	21.7
Little Southwest Miramichi River	1	-	-	-
	3	-	-	-
	4	-	-	-
	6	-	-	-
Sutherland Brook	1	239	26.2	7.2
Northwest Millstream	1	229	23.1	12.8
	2	189	24.6	11.7
	3	269	32.0	10.6
Big Sevogle River	1	-	-	-
	2	-	-	-
	3	-	-	-
Northwest Miramichi River	2	-	-	-
	3	-	-	-
	4	-	-	-
	5	-	-	-
	7	-	-	-
	9A	-	-	-
	9B	-	-	-
	13	-	-	-
	14	-	-	-
	15	-	-	-
	17	-	-	-
18	-	-	-	
19	-	-	-	
Overall mean		282	29.1	14.7
Total number of estimates		7	7	7

TABLE 40. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1971.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	455	30.5	21.7
	11	-	-	-
Little River	3	314	32.5	16.1
	2	-	-	-
	12	-	-	-
Portage River	1	-	-	-
	8	-	-	-
Little Sevogle River	1	418	30.2	17.2
	2	446	38.4	12.8
	3	372	30.0	16.7
Little Southwest Miramichi River	1	411	43.4	21.1
	3	382	50.3	16.7
	4	307	35.6	15.6
	6	354	25.9	20.0
Sutherland Brook	1	321	29.0	15.6
Northwest Millstream	1	344	26.8	18.3
	2	194	20.3	17.8
	3	226	32.8	18.3
Big Sevogle River	1	-	-	-
	2	-	-	-
	3	-	-	-
Northwest Miramichi River	2	-	-	-
	3	-	-	-
	4	-	-	-
	5	-	-	-
	7	-	-	-
	9A	-	-	-
	9B	-	-	-
	13	-	-	-
	14	-	-	-
	15	-	-	-
	17	-	-	-
18	-	-	-	
19	-	-	-	
Overall mean		347	37.8	17.5
Total number of estimates		13	13	13

TABLE 41. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1972.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	-	-	-
	12	-	-	-
Portage River	1	402	18.3	10.6
	8	-	-	-
Little Sevogle River	1	397	37.3	10.0
	2	520	50.8	10.0
	3	352	37.9	11.7
Little Southwest Miramichi River	1	347	40.1	15.0
	3	341	47.1	17.2
	4	273	25.9	10.6
	6	238	24.4	15.6
Sutherland Brook	1	251	29.5	13.9
Northwest Millstream	1	332	25.9	15.6
	2	212	27.2	15.6
	3	267	34.5	16.1
Big Sevogle River	1	-	-	-
	2	-	-	-
	3	-	-	-
Northwest Miramichi River	2	-	-	-
	3	-	-	-
	4	-	-	-
	5	-	-	-
	7	-	-	-
	9A	-	-	-
	9B	-	-	-
	13	-	-	-
	14	-	-	-
	15	-	-	-
	17	-	-	-
18	-	-	-	
19	-	-	-	
Overall mean		319	33.2	13.5
Total number of estimates		12	12	12

TABLE 42. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1973.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	329	29.5	11.1
	11	-	-	-
Little River	3	230	25.9	13.9
	2	290	17.0	12.2
	12	-	-	-
Portage River	1	387	12.9	16.7
	8	-	-	-
Little Sevogle River	1	358	28.2	16.7
	2	348	39.9	16.7
	3	377	23.1	14.4
Little Southwest Miramichi River	1	334	47.8	21.1
	3	334	47.8	22.2
	4	393	35.6	16.7
	6	232	27.2	22.2
Sutherland Brook	1	291	20.8	17.8
Northwest Millstream	1	331	12.2	18.9
	2	167	16.3	18.9
	3	256	31.0	18.3
Big Sevogle River	1	-	-	-
	2	-	-	-
	3	-	-	-
Northwest Miramichi River	2	-	-	-
	3	-	-	-
	4	-	-	-
	5	-	-	-
	7	-	-	-
	9A	-	-	-
	9B	-	-	-
	13	-	-	-
	14	-	-	-
	15	-	-	-
	17	-	-	-
	18	-	-	-
	19	-	-	-
Overall mean		304	27.7	17.2
Total number of estimates		15	15	15

TABLE 43. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1974.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	260	22.7	20.0
	11	-	-	-
Little River	3	-	-	-
	2	316	17.8	20.6
	12	328	17.2	18.3
Portage River	1	379	30.6	16.7
	8	139	25.6	18.9
Little Sevogle River	1	415	45.4	20.0
	2	384	41.8	16.7
	3	385	31.0	14.4
Little Southwest Miramichi River	1	345	46.8	21.1
	3	349	42.9	17.2
	4	283	26.4	13.3
	6	236	25.1	17.8
Sutherland Brook	1	288	19.2	18.3
Northwest Millstream	1	355	22.3	16.7
	2	207	23.5	18.3
	3	244	29.9	17.2
Big Sevogle River	1	357	22.9	15.6
	2	366	18.9	14.4
	3	366	28.5	7.8
Northwest Miramichi River	2	-	-	-
	3	306	44.9	16.7
	4	345	26.2	21.1
	5	258	36.7	22.2
	7	897	31.2	18.9
	9A	412	29.1	21.1
	9B	473	31.9	18.9
	13	325	24.6	15.6
	14	507	38.0	22.2
	15	414	29.9	23.3
	17	742	25.7	17.2
	18	293	27.1	18.3
	19	372	26.7	16.1
Overall mean		366	29.4	17.9
Total number of estimates		31	31	31

TABLE 44. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1975.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	322	31.5	22.0
	12	325	27.2	16.0
Portage River	1	404	27.4	22.0
	8	193	37.1	18.0
Little Sevogle River	1	297	23.6	22.2
	2	347	35.6	22.2
	3	339	23.1	14.4
Little Southwest Miramichi River	1	330	34.0	21.0
	3	335	36.3	15.0
	4	295	23.9	19.4
	6	237	20.8	22.0
Sutherland Brook	1	257	21.3	12.0
Northwest Millstream	1	-	-	-
	2	-	-	-
	3	-	-	-
Big Sevogle River	1	365	19.6	16.0
	2	410	20.3	16.0
	3	364	27.9	14.4
Northwest Miramichi River	2	284	23.6	12.8
	3	-	-	-
	4	373	30.7	18.0
	5	262	34.5	20.0
	7	828	28.2	17.0
	9A	386	24.9	20.0
	9B	400	31.5	18.0
	13	292	31.2	18.0
	14	-	-	-
	15	456	33.5	15.0
	17	733	21.3	12.8
	18	424	25.2	13.3
	19	390	41.4	13.0
Overall mean		371	28.3	17.3
Total number of estimates		26	26	26

TABLE 45. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1976.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	283	25.2	12.0
	12	312	23.4	18.0
Portage River	1	380	23.6	24.5
	8	170	20.8	20.0
Little Sevogle River	1	303	30.2	14.4
	2	354	35.6	15.6
	3	337	26.9	12.2
Little Southwest Miramichi River	1	271	32.5	14.0
	3	361	38.9	17.0
	4	311	27.7	14.4
	6	233	26.9	18.0
Sutherland Brook	1	265	17.8	15.0
Northwest Millstream	1	-	-	-
	2	-	-	-
	3	-	-	-
Big Sevogle River	1	332	24.4	15.0
	2	368	34.8	15.0
	3	369	30.7	10.0
Northwest Miramichi River	2	272	27.7	17.2
	3	-	-	-
	4	389	29.0	16.0
	5	260	29.7	17.2
	7	850	35.6	25.6
	9A	383	33.0	19.0
	9B	408	31.5	16.7
	13	297	30.0	17.0
	14	-	-	-
	15	443	32.5	9.0
	17	-	-	-
	18	427	32.8	12.2
	19	384	22.9	12.0
Overall mean		350	29.0	15.9
Total number of estimates		25	25	25

TABLE 46. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1977.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	290	20.3	14.0
	12	314	20.6	16.0
Portage River	1	357	15.8	18.0
	8	165	18.8	14.0
Little Sevogle River	1	341	22.1	18.9
	2	363	37.1	17.8
	3	235	23.1	14.4
Little Southwest Miramichi River	1	320	27.4	15.0
	3	393	37.6	22.0
	4	311	24.9	13.9
	6	250	22.9	16.0
Sutherland Brook	1	280	16.3	12.0
Northwest Millstream	1	-	-	-
	2	-	-	-
	3	-	-	-
Big Sevogle River	1	326	18.5	16.0
	2	297	27.9	14.0
	3	339	29.0	15.6
Northwest Miramichi River	2	277	19.6	17.2
	3	-	-	-
	4	267	27.4	23.0
	5	284	27.7	15.6
	7	779	20.6	15.0
	9A	382	33.8	20.0
	9B	417	35.8	18.9
	13	314	27.2	19.0
	14	-	-	-
	15	433	32.0	14.0
	17	721	25.4	17.0
	18	461	34.8	13.9
	19	381	23.6	10.0
Overall mean		358	26.8	16.2
Total number of estimates		26	26	26

TABLE 47. Summary of miscellaneous data on the sites electrofished on the Northwest Miramichi and tributaries in 1978.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Tomogonops River	10	-	-	-
	11	-	-	-
Little River	3	-	-	-
	2	291	20.1	13.9
	12	288	14.7	20.0
Portage River	1	319	12.7	12.0
	8	148	13.2	14.4
Little Sevogle River	1	357	30.2	17.0
	2	365	34.5	16.7
	3	237	24.4	18.0
Little Southwest Miramichi River	1	321	38.1	19.0
	3	388	43.7	16.0
	4	309	21.8	15.0
	6	240	21.3	21.0
Sutherland Brook	1	261	11.2	16.7
Northwest Millstream	1	-	-	-
	2	-	-	-
	3	-	-	-
Big Sevogle River	1	309	24.4	19.0
	2	336	22.4	15.0
	3	341	31.2	14.4
Northwest Miramichi River	2	271	16.8	20.0
	3	-	-	-
	4	308	33.0	20.0
	5	321	32.0	15.6
	7	821	27.7	16.1
	9A	398	36.3	17.0
	9B	434	36.1	17.0
	13	313	25.7	15.0
	14	-	-	-
	15	436	30.5	19.0
	17	717	28.5	15.6
	18	465	32.5	14.4
	19	384	27.7	21.0
Overall mean		361	26.6	16.9
Total number of estimates		26	26	26

TABLE 48. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1970.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	-	-	-
	2	-	-	-
	3	-	-	-
Barnaby River	1	-	-	-
	2	-	-	-
Renous River	1	189	30.9	22.0
	2	365	32.0	24.5
	3	268	32.0	21.0
	4	219	35.1	16.0
	5	301	-	17.0
	6	-	-	-
	7	-	-	-
	8	-	-	-
Main Southwest Miramichi River	7	183	41.7	21.0
	4	259	25.9	26.0
	10	314	24.9	22.0
	14	279	15.0	17.5
	11	438	12.7	22.0
	6	290	25.7	18.0
	5	343	34.5	19.0
	13	441	31.0	14.0
	1	634	27.2	28.0
	2	388	26.2	21.0
	3	260	30.7	24.0
	9	320	24.4	19.5
	12	178	40.4	13.0
8	562	30.0	20.5	
Bartholomew River	1	318	24.4	18.9
	2	386	23.6	22.2
	3	226	20.1	24.4
	4	-	-	-
	6	-	-	-
Morse Brook	1	143	32.8	14.4
	2	104	38.6	16.7
Cains River	3	-	-	-
	4	-	-	-
	6	-	-	-
	7	-	-	-
	8	-	-	-
Big Hole Brook	1	293	32.8	15.0
	2	346	22.9	10.0
	3	312	24.6	21.7
Betts Mill Brook	1	305	23.4	15.6
	2	306	24.4	13.9
Burntland Brook	1	-	-	-
	2	-	-	-
Taxis River	1	-	-	-
	2	-	-	-
	3	-	-	-
MacBean Brook	1	161	17.3	17.8
	2	129	15.5	18.3
Rocky Brook	1	248	43.7	21.1
	2	282	32.5	20.0
	3	325	35.3	20.0
	4	-	-	-
Teague Brook	1	235	21.3	23.9
	2	216	19.6	19.4
Overall mean		294	27.8	19.4
Total number of estimates		36	35	36

TABLE 49. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1971.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	-	-	-
	2	-	-	-
	3	-	-	-
Barnaby River	1	401	20.3	13.9
	2	298	16.8	15.0
Renous River	1	251	19.8	25.0
	2	369	31.2	19.0
	3	319	33.0	20.0
	4	-	-	-
	5	331	12.5	22.8
	6	482	23.4	15.0
	7	-	-	-
	8	-	-	-
Main Southwest Miramichi River	7	223	51.3	18.5
	4	254	30.0	21.5
	10	334	25.4	18.3
	14	272	14.2	24.5
	11	464	18.8	20.6
	6	308	15.0	17.2
	5	380	27.2	24.0
	13	324	27.7	23.0
	1	579	20.8	26.0
	2	371	21.1	19.4
	3	260	38.9	20.0
	9	302	33.3	22.5
12	315	23.6	15.0	
8	278	22.9	24.0	
Bartholomew River	1	367	23.4	16.1
	2	330	17.8	20.0
	3	-	-	-
	4	262	20.1	11.1
	6	-	-	-
	6	-	-	-
Morse Brook	1	242	23.6	10.0
	2	120	32.7	13.3
Cains River	3	-	-	-
	4	437	15.5	18.0
	6	217	24.5	19.4
	7	221	20.8	15.0
	8	355	24.9	21.1
Big Hole Brook	1	278	25.7	15.6
	2	426	15.0	11.1
	3	416	20.1	20.0
Betts Mill Brook	1	328	20.1	11.7
	2	330	19.6	13.9
Burntland Brook	1	220	39.1	15.5
	2	307	21.3	12.8
Taxis River	1	-	-	-
	2	-	-	-
	3	-	-	-
MacBean Brook	1	260	15.5	17.8
	2	222	17.5	16.7
Rocky Brook	1	249	28.5	17.8
	2	248	14.7	16.7
	3	273	19.8	17.8
	4	296	27.9	8.9
Teague Brook	1	253	21.3	17.8
	2	290	20.8	17.8
Overall mean		313	23.5	17.8
Total number of estimates		45	45	45

TABLE 50. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1972.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	-	-	-
	2	-	-	-
	3	-	-	-
Barnaby River	1	393	32.8	18.3
	2	417	22.6	9.4
Renous River	1	-	-	-
	2	242	35.8	-
	3	258	44.7	-
	4	-	-	-
	5	376	29.7	17.8
	6	-	-	-
	7	279	27.4	15.6
	8	-	-	-
Main Southwest Miramichi River	7	-	-	-
	4	257	41.4	21.1
	10	482	23.1	19.4
	14	-	-	-
	11	298	15.0	15.6
	6	241	18.0	-
	5	260	24.4	-
	13	478	31.2	-
	1	576	22.1	16.7
	2	372	35.3	15.6
	3	293	32.8	15.6
	9	234	23.1	17.8
	12	326	31.5	8.9
	8	406	32.5	16.7
Bartholomew River	1	382	25.7	17.8
	2	399	27.2	17.8
	3	-	-	-
	4	312	38.1	11.7
	6	-	-	-
Morse Brook	1	275	33.8	13.3
	2	131	53.6	12.8
Cains River	3	335	38.6	13.9
	4	167	43.9	18.9
	6	231	21.8	17.8
	7	-	-	-
	8	270	28.2	15.6
Big Hole Brook	1	297	37.1	13.3
	2	414	15.5	12.2
	3	346	24.6	16.7
Betts Mill Brook	1	309	23.1	12.8
	2	357	21.1	11.1
Burntland Brook	1	358	33.8	14.4
	2	358	30.8	17.2
Taxis River	1	385	32.0	18.9
	2	371	18.9	13.3
	3	328	26.0	17.2
MacBean Brook	1	369	19.8	14.4
	2	322	15.8	13.9
Rocky Brook	1	289	39.6	15.0
	2	284	21.8	15.6
	3	-	-	-
	4	304	37.9	15.6
Teague Brook	1	325	42.9	16.7
	2	303	25.9	13.9
Overall mean		327	29.6	15.4
Total number of estimates		44	44	39

TABLE 51. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1973.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	-	-	-
	2	-	-	-
	3	-	-	-
Barnaby River	1	374	31.2	18.3
	2	388	15.8	18.9
Renous River	1	282	25.2	18.9
	2	325	37.6	22.8
	3	260	-	21.1
	4	-	-	-
	5	337	18.8	20.6
	6	393	25.2	23.3
	7	334	30.7	21.1
	8	327	21.8	17.2
Main Southwest Miramichi River	7	221	30.7	15.6
	4	275	24.4	21.7
	10	334	33.5	21.1
	14	334	17.3	18.9
	11	441	21.1	17.2
	6	332	-	18.9
	5	404	38.9	22.2
	13	382	24.9	21.1
	1	376	-	20.0
	2	372	36.6	20.0
	3	266	32.3	21.7
	9	312	23.6	15.6
	12	327	36.3	20.6
	8	440	40.6	18.9
Bartholomew River	1	337	40.6	18.9
	2	376	18.5	18.9
	3	-	-	-
	4	313	54.5	18.0
	6	-	-	-
Morse Brook	1	198	32.8	14.4
	2	99	30.5	15.6
Cains River	3	368	-	14.4
	4	306	38.1	21.1
	6	212	24.7	18.9
	7	-	-	-
	8	342	30.2	10.0
Big Hole Brook	1	294	29.7	16.7
	2	444	16.8	10.0
	3	312	23.9	21.1
Betts Mill Brook	1	264	22.1	15.6
	2	219	22.1	13.3
Burntland Brook	1	223	38.6	17.2
	2	276	29.6	13.9
Taxis River	1	303	32.8	18.9
	2	406	25.9	15.6
	3	304	25.1	14.4
MacBean Brook	1	341	21.8	15.6
	2	403	31.2	16.7
Rocky Brook	1	315	55.9	17.8
	2	273	23.6	16.7
	3	-	-	-
	4	210	35.6	18.3
Teague Brook	1	293	35.6	21.1
	2	291	26.2	15.6
Overall mean		328	29.6	18.1
Total number of estimates		49	45	49

TABLE 52. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1974.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	263	41.8	13.9
	2	291	19.8	16.1
	3	353	17.8	17.2
Barnaby River	1	369	23.7	21.1
	2	328	27.4	18.9
Renous River	1	-	-	-
	2	327	42.6	18.9
	3	343	32.2	17.8
	4	-	-	-
	5	360	25.2	14.4
	6	363	23.7	20.6
	7	263	26.2	17.8
	8	306	29.4	18.9
Main Southwest Miramichi River	7	217	35.0	18.3
	4	295	25.6	18.9
	10	326	30.2	17.8
	14	346	19.3	15.6
	11	334	23.5	20.0
	6	344	23.1	19.4
	5	391	35.6	17.8
	13	419	22.2	20.0
	1	251	17.5	21.1
	2	325	39.5	14.4
	3	295	38.1	16.7
	9	292	22.9	15.6
Bartholomew River	12	276	28.2	16.7
	8	421	32.2	16.1
	1	368	24.8	18.9
	2	369	19.6	18.9
	3	-	-	-
	6	246	20.1	18.3
Morse Brook	1	219	30.5	14.4
	2	127	30.3	16.7
Cains River	3	600	26.0	13.3
	4	295	22.0	21.1
	6	198	23.7	23.3
	7	-	-	-
	8	359	29.5	10.0
Big Hole Brook	1	287	31.9	12.2
	2	402	21.4	9.4
	3	313	36.4	12.2
Betts Mill Brook	1	286	26.5	10.0
	2	235	28.5	12.2
Burntland Brook	1	274	39.1	16.7
	2	301	31.6	14.4
Taxis River	1	437	35.1	18.9
	2	358	31.3	17.8
	3	310	32.7	14.4
MacBean Brook	1	361	37.8	14.4
	2	334	31.7	13.3
Rocky Brook	1	240	34.4	16.7
	2	255	18.3	16.7
	3	-	-	-
	4	170	35.7	20.0
Teague Brook	1	237	26.8	17.8
	2	254	22.2	14.4
Overall mean		312	28.5	16.7
Total number of estimates		52	52	52

TABLE 53. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1975.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	257	33.3	15.6
	2	260	20.1	12.0
	3	329	23.4	14.0
Barnaby River	1	364	18.3	14.4
	2	336	23.6	17.8
Renous River	1	-	-	-
	2	330	40.6	22.0
	3	228	22.6	24.0
	4	-	-	-
	5	361	18.3	21.0
	6	336	20.1	23.0
	7	256	29.7	20.5
	8	294	23.4	20.0
Main Southwest Miramichi River	7	238	37.6	23.0
	4	251	22.4	22.0
	10	361	25.2	21.0
	14	308	22.4	22.8
	11	372	22.9	20.6
	6	400	20.6	27.0
	5	381	27.4	21.0
	13	335	14.5	20.0
	1	378	16.0	25.0
	2	-	21.1	14.4
	3	306	27.7	21.0
	9	286	20.6	16.1
Bartholomew River	12	257	18.9	24.0
	8	355	25.2	19.5
	1	-	-	-
	2	-	-	-
	3	-	-	-
	6	-	-	-
Morse Brook	1	225	15.8	12.8
	2	96	20.1	12.8
Cains River	3	538	29.5	20.0
	4	303	15.8	18.0
	6	218	29.7	15.0
	7	-	-	-
	8	362	27.2	15.0
Big Hole Brook	1	307	27.9	18.9
	2	390	16.3	13.3
	3	348	23.6	17.8
Betts Mill Brook	1	295	20.3	9.0
	2	252	22.1	11.1
Burntland Brook	1	280	31.0	19.4
	2	306	19.8	17.8
Taxis River	1	466	25.7	21.1
	2	390	25.2	18.9
	3	321	28.5	20.0
MacBean Brook	1	365	22.4	18.9
	2	292	25.9	17.8
Rocky Brook	1	254	26.9	12.8
	2	288	20.1	18.0
	3	-	-	-
	4	162	31.0	13.0
Teague Brook	1	228	17.8	22.2
	2	269	19.6	20.0
Overall mean		310	23.7	18.4
Total number of estimates		48	48	48

TABLE 54. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1976.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	-	-	-
	2	305	28.2	15.0
	3	370	25.4	15.0
Barnaby River	1	376	40.6	17.8
	2	1374	24.6	15.6
Renous River	1	-	-	-
	2	304	34.8	16.5
	3	353	36.3	19.0
	4	-	-	-
	5	381	15.2	19.0
	6	-	-	-
	7	249	28.5	21.5
	8	245	32.0	13.0
Main Southwest Miramichi River	7	216	36.3	19.0
	4	299	23.1	13.0
	10	361	21.8	19.0
	14	316	33.0	17.8
	11	-	-	-
	6	-	-	-
	5	401	24.6	24.0
	13	321	20.3	14.0
	1	428	28.7	16.0
	2	-	-	-
	3	357	25.2	21.0
Bartholomew River	9	-	-	-
	12	282	30.2	18.0
	8	384	30.9	14.0
	1	-	-	-
	2	-	-	-
Morse Brook	3	-	-	-
	6	-	-	-
Cains River	1	236	29.5	13.3
	2	100	27.9	13.0
	3	434	27.4	11.0
	4	310	18.5	23.0
Big Hole Brook	6	200	26.4	23.0
	7	-	-	-
	8	314	29.7	12.2
	1	297	22.1	13.9
Betts Mill Brook	2	413	15.2	7.8
	3	362	27.9	20.0
	1	299	18.0	12.0
Burntland Brook	2	259	16.8	11.7
	1	288	35.6	12.2
Taxis River	2	-	-	-
	1	442	31.2	12.2
	2	437	27.7	12.2
MacBean Brook	3	344	24.9	10.5
	1	359	18.0	12.2
Rocky Brook	2	300	21.8	11.7
	1	-	-	-
	2	297	26.2	18.0
	3	-	-	-
Teague Brook	4	202	34.0	16.0
	1	231	23.6	16.7
Overall mean	2	266	23.9	11.7
		318	27.2	15.6
Total number of estimates		40	40	40

TABLE 55. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1977.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	240	39.1	14.4
	2	310	30.2	18.0
	3	400	20.8	16.0
Barnaby River	1	340	30.0	17.2
	2	376	22.4	18.3
Renous River	1	-	-	-
	2	293	30.7	19.0
	3	329	24.4	23.0
	4	-	-	-
	5	417	11.3	18.0
	6	-	-	-
	7	268	24.9	17.0
	8	271	20.3	23.0
Main Southwest Miramichi River	7	201	35.3	14.4
	4	292	18.8	15.0
	10	412	23.1	16.7
	14	271	18.8	17.8
	11	-	-	-
	6	485	19.8	24.0
	5	374	29.0	25.0
	13	323	13.0	21.0
	1	391	16.0	21.1
	2	287	25.2	21.1
	3	372	24.6	15.0
	9	286	24.6	17.8
	12	288	24.5	-
8	328	25.7	11.0	
Bartholomew River	1	-	-	-
	2	-	-	-
	3	-	-	-
	4	-	-	-
	6	-	-	-
	1	254	19.8	11.1
Cains River	2	100	27.9	13.3
	3	456	19.8	12.0
	4	314	15.8	16.0
	6	236	20.6	19.0
Big Hole Brook	7	-	-	-
	8	349	20.1	12.2
	1	314	29.0	13.3
Betts Mill Brook	2	388	16.8	9.5
	3	395	35.6	15.6
	1	301	19.3	13.0
Burntland Brook	2	227	23.4	10.6
	1	285	31.0	12.8
Taxis River	2	293	17.5	6.7
	1	427	24.4	20.0
	2	433	20.6	15.6
MacBean Brook	3	328	17.5	19.0
	1	352	22.1	13.9
Rocky Brook	2	184	22.6	16.7
	1	259	25.9	13.3
	2	269	18.5	16.0
	3	-	-	-
Teague Brook	4	167	31.0	14.0
	1	255	27.4	13.9
Overall mean	2	261	22.4	10.6
		313	23.5	16.0
Total number of estimates		46	46	45

TABLE 56. Summary of miscellaneous data on the sites electrofished on the Southwest Miramichi and tributaries in 1978.

Stream	Site number	Area (m ²)	Avg depth (cm)	Water temp (°C)
Dungarvon River	1	243	31.5	15.6
	2	318	27.9	18.0
	3	384	23.9	14.4
Barnaby River	1	337	23.1	17.8
	2	363	15.0	16.7
Renous River	1	-	-	-
	2	337	40.6	16.7
	3	326	30.7	16.0
	4	-	-	-
	5	419	21.1	19.0
	6	-	-	-
	7	278	35.3	16.7
	8	272	24.9	21.0
Main Southwest Miramichi River	7	208	27.2	20.0
	4	409	25.4	21.0
	10	419	33.3	15.6
	14	269	18.0	17.8
	11	-	-	-
	6	458	17.0	21.0
	5	483	26.2	21.0
	13	326	32.0	22.0
	1	395	9.1	20.0
	2	286	22.6	17.8
	3	373	28.5	23.0
Bartholomew River	9	288	17.8	18.9
	12	274	20.8	22.0
	8	338	28.5	21.0
	1	-	-	-
	2	-	-	-
Morse Brook	3	-	-	-
	4	-	-	-
	6	-	-	-
Morse Brook	1	269	22.1	14.4
	2	218	15.0	16.7
Cains River	3	343	22.6	14.0
	4	317	16.0	22.0
	6	242	26.2	21.0
	7	-	-	-
Big Hole Brook	8	359	16.0	17.8
	1	315	28.5	14.0
	2	366	21.1	10.0
Betts Mill Brook	3	396	28.7	15.6
	1	332	21.8	11.0
Burntland Brook	2	257	18.0	10.0
	1	302	22.1	16.1
Taxis River	2	329	15.5	20.0
	1	424	23.1	18.9
	2	429	14.2	18.9
MacBean Brook	3	294	16.3	20.0
	1	333	16.0	13.3
Rocky Brook	2	169	17.5	13.3
	1	261	28.2	16.7
	2	284	18.5	16.7
	3	-	-	-
Teague Brook	4	168	33.6	18.0
	1	261	19.8	16.7
Overall mean	2	259	19.8	16.7
		320	23.1	17.5
Total number of estimates		46	46	46

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