

**Maine Department of Environmental Protection
Biological Monitoring Unit
BioME Aquatic Life Classification Attainment Report**

Station Information

Station Number: S733	DEP Drainage: St. John
Waterbody: Coloney Brook	HUC Code: 01010004
Town: FORT FAIRFIELD	HUC Name: Aroostook
Directions: 29m below Martin Rd culvert	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order:

Sample Information

Log Number: 1381	Type of Sample: Riffle Bags	Date Deployed: 20-JUL-04
Subsample Factor: X1	Replicates: 3	Date Retrieved: 17-AUG-04

Classification Attainment

Statutory Class: B	Final Determination: A	
Model Result with P > .6: A	Reason for Determination: Model	
Date Last Calculated:		

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.43	Class A, B, or C	1.00
Class B	0.51	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.99	Class A	0.67
Class C or Non-Attainment	0.01	Class B or C or Non-Attainment	0.33

Model Variables

01 Total Abundance of Individuals	607.33	18 Relative Abundance - Ephemeroptera	0.12
02 Generic Richness	54.00	19 EPT Generic Richness	20.00
03 Plecoptera Abundance	1.33	21 Sum of Abundances: <i>Dicrotendipes</i> ,	5.33
04 Ephemeroptera Abundance	75.67	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	4.03	23 Relative Generic Richness- Plecoptera	0.06
06 Hilsenhoff Biotic Index	4.56	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	178.05
07 Relative Abundance - Chironomidae	0.28	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.46	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	4.00
09 <i>Hydropsyche</i> Abundance	106.28	28 EP Generic Richness/14	0.93
11 <i>Cheumatopsyche</i> Abundance	150.39	30 Presence of Class A Indicator Taxa/7	0.29
12 EPT Generic Richness/ Diptera Generic Richness	0.80		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.00	1	Cheumatopsyche	24.76
15 Perlidae Abundance (Family Functional Group)	0.00	2	Hydropsyche	17.50
16 Tanypodinae Abundance (Family Functional Group)	5.67	3	Parametriocnemus	7.36
17 Chironomini Abundance (Family Functional Group)	5.00	4	Tvetenia	6.53
		5	Baetis	5.98

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Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Lotic

Waterbody Information

Water Temperature: 16.5 °C	Specific Conductance 419.0 uS/cm	Channel Width: 4.7 m
Velocity: 36 cm/s	Dissolved Oxygen: 8.9 ppm	Channel Depth: 20.0 cm

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Cultivated	Partly Open		Below Road Crossing
Pasture			

Substrate

Boulder	Rubble	Gravel	Sand
10%	70%	15%	5%

Comments about the Station or Sample

8/17/04 Data:
Flow: 27cm/s; Depth: 18cm; Temp: 15.1C; SPC: 427uS/cm; DO: 8.0mg/L; pH:

Comments about the Final Determination

**Maine Department of Environmental Protection
Biological Monitoring Unit**

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Town: FORT FAIRFIELD

Log Number: 1381 **Subsample:** X1

Replicates: 3

Calculated:

BioME Aquatic Life Taxonomic Inventory Report

Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
		<i>Dero</i>	08020202007			0.67	0.67
<i>Nais</i>	08020202009	0.67	0.67		CG	0.1	0.1
<i>Ophidonais</i>	08020202010	1.67	1.67		CG	0.3	0.3
<i>Cambarus</i>	09010301007	0.33	0.33		CG	0.1	0.1
<i>Nemouridae</i>	09020201	0.33	0.33		--	0.1	0.1
<i>Leuctridae</i>	09020204	0.67	0.67		--	0.1	0.1
<i>Leuctra</i>	09020204020	0.33	0.33	0	SH	0.1	0.1
<i>Baetis</i>	09020401001	23.33	36.33	4	CG	3.8	6.0
<i>Baetis flavistriga</i>	09020401001004	13.00	0.00		--	2.1	0.0
<i>Cloeon</i>	09020401004	0.67	0.67	2	CG	0.1	0.1
<i>Acentrella</i>	09020401008	0.00	2.67	3	CG	0.0	0.4
<i>Acentrella ampla</i>	09020401008001	2.67	0.00		--	0.4	0.0
<i>Heptagenia</i>	09020402010	2.33	2.33	2	SC	0.4	0.4
<i>Leucrocuta</i>	09020402011	0.67	0.67	1	SC	0.1	0.1
<i>Stenacron</i>	09020402014	15.67	15.67	7	SC	2.6	2.6
<i>Stenonema</i>	09020402015	4.00	4.00	4	SC	0.7	0.7
<i>Paraleptophlebia</i>	09020406026	5.33	5.33	1	CG	0.9	0.9
<i>Ephemerella</i>	09020410035	6.33	6.33	1	CG	1.0	1.0
<i>Tricorythodes</i>	09020411038	1.67	1.67	4	CG	0.3	0.3
<i>Dolophilodes</i>	09020601001	11.33	11.33	0	CF	1.9	1.9
<i>Hydropsychidae</i>	09020604	53.00	0.00		--	8.7	0.0
<i>Cheumatopsyche</i>	09020604015	119.33	150.39	5	CF	19.6	24.8
<i>Hydropsyche</i>	09020604016	84.33	106.28	4	CF	13.9	17.5
<i>Rhyacophila</i>	09020605019	20.67	20.67	2	PR	3.4	3.4
<i>Glossosoma</i>	09020606020	1.00	1.00	0	SC	0.2	0.2
<i>Hydroptila</i>	09020607026	27.00	27.00	6	P	4.4	4.4
<i>Oecetis</i>	09020618078	1.33	1.33	8	PR	0.2	0.2
<i>Tipula</i>	09021001002	1.00	1.00	4	SH	0.2	0.2
<i>Antocha</i>	09021001004	0.67	0.67	3	CG	0.1	0.1
<i>Nilotanypus</i>	09021011012	0.00	2.67	6	PR	0.0	0.4
<i>Nilotanypus fimbriatus</i>	09021011012027	2.67	0.00		--	0.4	0.0
<i>Thienemannimyia</i>	09021011020	3.00	3.00	3	PR	0.5	0.5
<i>Pagastia</i>	09021011025	7.33	7.33	1	--	1.2	1.2
<i>Corynoneura</i>	09021011036	1.33	1.33	7	CG	0.2	0.2
<i>Cricotopus</i>	09021011037	1.33	18.33	7	SH	0.2	3.0
<i>Cricotopus bicinctus</i>	09021011037057	17.00	0.00		--	2.8	0.0
<i>Eukiefferiella</i>	09021011041	0.33	0.33	8	CG	0.1	0.1

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		Actual	Adjusted			Actual	Adjusted
<i>Orthocladius</i>	09021011050	11.33	11.33	6	CG	1.9	1.9
<i>Parakiefferiella</i>	09021011052	2.67	2.67		CG	0.4	0.4
<i>Parametriocnemus</i>	09021011053	44.67	44.67	5	CG	7.4	7.4
<i>Psectrocladius</i>	09021011056	0.33	0.33	8	CG	0.1	0.1
<i>Rheocricotopus</i>	09021011057	6.00	6.00	6	CG	1.0	1.0
<i>Thienemanniella</i>	09021011062	2.67	2.67	6	CG	0.4	0.4
<i>Tvetenia</i>	09021011065	0.00	39.67	5	CG	0.0	6.5
<i>Tvetenia paucunca</i>	09021011065114	39.67	0.00		--	6.5	0.0
<i>Micropsectra</i>	09021011070	5.33	5.33	7	CG	0.9	0.9
<i>Rheotanytarsus</i>	09021011072	7.67	7.67	6	CF	1.3	1.3
<i>Stempellina</i>	09021011073	4.00	4.00	2	CG	0.7	0.7
<i>Tanytarsus</i>	09021011076	9.33	9.33	6	CF	1.5	1.5
<i>Microtendipes</i>	09021011094	0.33	0.33	6	CF	0.1	0.1
<i>Polypedilum</i>	09021011102	1.33	4.67	6	SH	0.2	0.8
<i>Polypedilum aviceps</i>	09021011102181	3.33	0.00		--	0.5	0.0
<i>Simulium</i>	09021012047	2.00	2.00	4	CF	0.3	0.3
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.1	0.1
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Muscidae</i>	09021022	3.00	3.00	6	--	0.5	0.5
<i>Elmidae</i>	09021113	7.00	0.00		--	1.2	0.0
<i>Dubiraphia</i>	09021113064	0.67	0.89	6	CG	0.1	0.1
<i>Optioservus</i>	09021113067	11.67	15.49	3	SC	1.9	2.6
<i>Promoresia</i>	09021113069	8.00	10.63		--	1.3	1.8
<i>Stenelmis</i>	09021113070	1.00	1.33	5	SC	0.2	0.2
<i>Physidae</i>	10010202	1.67	1.67		SC	0.3	0.3