



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Classification Attainment Report

Station Information

Station Number: S-693
Waterbody: Martin Stream - Station 693
Town: Turner
Directions: 35 METERS BELOW RT. 117 BRIDGE CROSSING
DEP Drainage: Androscoggin
HUC8 Name: Lower Androscoggin
Latitude: 44 15 33.89 N
Longitude: 70 17 30.41 W
Stream Order: 4

Sample Information

Log Number: 2210 Type of Sample: ROCK BAG Date Deployed: 7/15/2013
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/19/2013

Classification Attainment

Statutory Class: B **Final Determination: A** Date: 2/6/2014
Model Result with P>.6: A **Reason for Determination: Model**
Date Last Calculated: 2/6/2014 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.56	Class A, B, or C	1.00
Class B	0.42	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	1.00	Class A	0.93
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.07

Model Variables

01 Total Mean Abundance	383.00	18 Relative Abundance Ephemeroptera	0.18
02 Generic Richness	38.00	19 EPT Generic Richness	13.00
03 Plecoptera Mean Abundance	7.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	69.67	23 Relative Generic Richness- Plecoptera	0.05
05 Shannon-Wiener Generic Diversity	3.33	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	111.33
06 Hilsenhoff Biotic Index	4.14	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	30.33
07 Relative Abundance - Chironomidae	0.07	28 EP Generic Richness/14	0.43
08 Relative Generic Richness Diptera	0.45	30 Presence of Class A Indicator Taxa/7	0.57
09 <i>Hydropsyche</i> Abundance	95.67		
11 <i>Cheumatopsyche</i> Abundance	108.67		
12 EPT Generic Richness/ Diptera Generic Richness	0.76		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	7.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.67		
17 Chironomini Abundance (Family Functional Group)	6.67		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	28.37
2	<i>Hydropsyche</i>	24.98
3	<i>Maccaffertium</i>	7.48
4	<i>Simulium</i>	7.31
5	<i>Baetis</i>	7.14



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature: 22.8 deg C
Dissolved Oxygen: 7.1 mg/l
Specific Conductance: 68 uS/cm
Velocity: 111.9 cm/s
pH: 6.28
Wetted Width: 11 m
Bankfull Width: 16 m
Depth: 50 cm

Waterbody Information - Retrieval

Temperature: 20.2 deg C
Dissolved Oxygen: 7.8 mg/l
Specific Conductance: 58 uS/cm
Velocity: 103.5 cm/s
pH: 6.23
Wetted Width: 16 m
Bankfull Width: 16 m
Depth: 45 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Cultivated

Upland Hardwood

Canopy Cover

Partly Open

Terrain

Rolling

Potential Stressor

Agricultural Runoff

Location

Below Agriculture NPS

Below Road Crossing

Main Stem

Substrate

Boulder 15 %

Gravel 15 %

Rubble/Cobble 55 %

Sand 10 %

Silt 5 %

Landcover Summary - 2004 Data

Sample Comments

8/19/2013 - FISH OBSERVED, MILKY COLOR, UNDESCRIBABLE ODOR. ATTEMPTED TO PICK UP
ON 8/12/2013 - WATER LEVELS TOO HIGH

7/15/2013 - SOME SILT



**Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report**

Station Number: S-693

Waterbody: Martin Stream - Station 693

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Log Number: 2210

Subsample Factor: X1

Replicates: 3

Calculated: 2/6/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		1.67	0	PR		0.4
<i>Acroneuria abnormis</i>	09020209042121	0.33		0	PR	0.1	
<i>Acroneuria lycorias</i>	09020209042125	1.33			--	0.3	
<i>Paragnetina</i>	09020209049		5.67	1	PR		1.5
<i>Paragnetina media</i>	09020209049151	5.67			--	1.5	
<i>Boyeria</i>	09020301004		1.00	2	PR		0.3
<i>Boyeria vinosa</i>	09020301004012	1.00			--	0.3	
<i>Baetis</i>	09020401001		27.33	4	CG		7.1
<i>Baetis brunneicolor</i>	09020401001003	14.00			--	3.7	
<i>Baetis flavistriga</i>	09020401001004	5.33			--	1.4	
<i>Baetis tricaudatus</i>	09020401001012	8.00			--	2.1	
<i>Leucrocuta</i>	09020402011	1.00	1.00	1	SC	0.3	0.3
<i>Maccaffertium</i>	09020402015		28.67	4	SC		7.5
<i>Maccaffertium vicarium</i>	09020402015055	28.67			--	7.5	
<i>Serratella</i>	09020410037	12.67	12.67	2	CG	3.3	3.3
<i>Chimarra</i>	09020601003		15.33	2	CF		4.0
<i>Chimarra aterrima</i>	09020601003002	15.33			--	4.0	
<i>Cheumatopsyche</i>	09020604015	108.67	108.67	5	CF	28.4	28.4
<i>Hydropsyche</i>	09020604016		95.67	4	CF		25.0
<i>Hydropsyche morosa</i>	09020604016030	48.33			--	12.6	
<i>Hydropsyche sparna</i>	09020604016032	47.33			--	12.4	
<i>Rhyacophila</i>	09020605019		1.00	2	PR		0.3
<i>Rhyacophila fuscula</i>	09020605019060	1.00			PR	0.3	
<i>Brachycentrus</i>	09020609043	1.00	1.00	0	CF	0.3	0.3
<i>Ceraclea</i>	09020618072	0.33	0.33	3	CG	0.1	0.1
<i>Oecetis</i>	09020618078	0.33	0.33	8	PR	0.1	0.1
<i>Nigronia</i>	09020701003		1.33	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	1.33			--	0.3	
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.1	0.1
<i>Labrundinia</i>	09021011008		0.33	7	PR		0.1
<i>Labrundinia neopilosella</i>	09021011008021	0.33			--	0.1	
<i>Thienemannimyia</i>	09021011020		0.33	3	PR		0.1
<i>Thienemannimyia/arctopelopia</i> group	09021011020041	0.33			--	0.1	
<i>Pagastia</i>	09021011025	0.33	0.33	1	--	0.1	0.1
<i>Cricotopus</i>	09021011037		1.67	7	SH		0.4
<i>Cricotopus bicinctus</i>	09021011037057	1.67			--	0.4	
<i>Eukiefferiella</i>	09021011041		1.00	8	CG		0.3



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<i>Eukiefferiella brehmi</i> group	09021011041073	1.00			--	0.3	
<i>Nanocladius</i>	09021011049	3.00	3.00	3	CG	0.8	0.8
<i>Orthocladius</i>	09021011050	1.00	1.00	6	CG	0.3	0.3
<i>Parametriocnemus</i>	09021011053	1.33	1.33	5	CG	0.3	0.3
<i>Rheocricotopus</i>	09021011057		0.33	6	CG		0.1
<i>Rheocricotopus robacki</i>	09021011057105	0.33			--	0.1	
<i>Tvetenia</i>	09021011065		6.00	5	CG		1.6
<i>Tvetenia paucunca</i>	09021011065114	6.00			--	1.6	
<i>Paratanytarsus</i>	09021011071	1.00	1.00	6	--	0.3	0.3
<i>Rheotanytarsus</i>	09021011072	1.67	1.67	6	CF	0.4	0.4
<i>Tanytarsus</i>	09021011076	1.00	1.00	6	CF	0.3	0.3
<i>Microtendipes</i>	09021011094		3.67	6	CF		1.0
<i>Microtendipes rydalensis</i> group	09021011094168	3.67			--	1.0	
<i>Polypedilum</i>	09021011102		3.00	6	SH		0.8
<i>Polypedilum aviceps</i>	09021011102181	2.67			--	0.7	
<i>Polypedilum flavum</i>	09021011102182	0.33			--	0.1	
<i>Simulium</i>	09021012047	28.00	28.00	4	CF	7.3	7.3
<i>Psephenus</i>	09021108058		8.00	4	SC		2.1
<i>Psephenus herricki</i>	09021108058028	8.00			--	2.1	
<i>Promoresia</i>	09021113069	1.67	1.67		--	0.4	0.4
<i>Stenelmis</i>	09021113070	0.67	0.67	5	SC	0.2	0.2
<i>Sperchon</i>	09030107001	0.33	0.33		--	0.1	0.1
<i>Ferrissia</i>	10010204035	16.33	16.33		SC	4.3	4.3
<i>Sphaerium</i>	10020201003	0.33	0.33		CF	0.1	0.1