



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

Station Information

Station Number: S-346

Waterbody: Swift River - Station 346

Town: Roxbury

Directions: RT. 17

DEP Drainage: Androscoggin

HUC8 Name: Lower Androscoggin

Latitude: 44 40 57.34 N

Longitude: 70 36 12.68 W

Stream Order: 4

Sample Information

Log Number: 2221

Type of Sample: ROCK BAG

Date Deployed: 7/25/2013

Subsample Factor: X1

Replicates: 1

Date Retrieved: 8/26/2013

Classification Attainment

Statutory Class: A

Final Determination: B

Date: 3/18/2014

Model Result with P>.6: B

Reason for Determination: Model

Date Last Calculated: 3/17/2014

Comments: Disturbed Samples. Only one of three samplers recovered.

Model Probabilities

First Stage Model

Class A	0.14	Class C	0.29
Class B	0.57	NA	0.00

B or Better Model

Class A or B	0.80
Class C or Non-Attainment	0.20

C or Better Model

Class A, B, or C	1.00
Non-Attainment	0.00

A Model

Class A	0.12
Class B or C or Non-Attainment	0.88

Model Variables

01 Total Mean Abundance	319.00	18 Relative Abundance Ephemeroptera	0.18																					
02 Generic Richness	41.00	19 EPT Generic Richness	19.00																					
03 Plecoptera Mean Abundance	2.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	4.00																					
04 Ephemeroptera Mean Abundance	57.00	23 Relative Generic Richness- Plecoptera	0.05																					
05 Shannon-Wiener Generic Diversity	4.04	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	131.00																					
06 Hilsenhoff Biotic Index	5.60	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	37.00																					
07 Relative Abundance - Chironomidae	0.68	28 EP Generic Richness/14	0.71																					
08 Relative Generic Richness Diptera	0.49	30 Presence of Class A Indicator Taxa/7	0.29																					
09 <i>Hydropsyche</i> Abundance	14.00	<table><tr><th colspan="3">Five Most Dominant Taxa</th></tr><tr><th>Rank</th><th>Taxon Name</th><th>Percent</th></tr><tr><td>1</td><td><i>Cricotopus</i></td><td>28.84</td></tr><tr><td>2</td><td><i>Maccaffertium</i></td><td>11.60</td></tr><tr><td>3</td><td><i>Polypedilum</i></td><td>8.78</td></tr><tr><td>4</td><td><i>Tanytarsus</i></td><td>7.52</td></tr><tr><td>5</td><td><i>Hydropsyche</i></td><td>4.39</td></tr></table>		Five Most Dominant Taxa			Rank	Taxon Name	Percent	1	<i>Cricotopus</i>	28.84	2	<i>Maccaffertium</i>	11.60	3	<i>Polypedilum</i>	8.78	4	<i>Tanytarsus</i>	7.52	5	<i>Hydropsyche</i>	4.39
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Rank	Taxon Name	Percent																						
1	<i>Cricotopus</i>	28.84																						
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4	<i>Tanytarsus</i>	7.52																						
5	<i>Hydropsyche</i>	4.39																						
11 <i>Cheumatopsyche</i> Abundance	10.00																							
12 EPT Generic Richness/ Diptera Generic Richness	0.95																							
13 Relative Abundance - Oligochaeta	0.00																							
15 Perlidae Mean Abundance (Family Functional Group)	0.00																							
16 Tanypodinae Mean Abundance (Family Functional Group)	20.00																							
17 Chironomini Abundance (Family Functional Group)	36.00																							



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Station Number: S-346	Town: Roxbury	Date Deployed: 7/25/2013
Log Number: 2221	Waterbody: Swift River - Station 346	Date Retrieved: 8/26/2013

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	15.9 deg C
Dissolved Oxygen:	8.5 mg/l
Specific Conductance:	16 uS/cm
Velocity:	45.7 cm/s
pH:	5.62
Wetted Width:	23 m
Bankfull Width:	25 m
Depth:	70 cm

Waterbody Information - Retrieval

Temperature:	17.8 deg C
Dissolved Oxygen:	8.8 mg/l
Specific Conductance:	19 uS/cm
Velocity:	
pH:	5.45
Wetted Width:	20.2 m
Bankfull Width:	25 m
Depth:	54 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Pasture
Upland Hardwood

Canopy Cover

Open

Terrain

Hilly

Potential Stressor

Logging

Location

Main Stem

Substrate

Boulder	20 %
Gravel	10 %
Rubble/Cobble	65 %
Sand	5 %

Landcover Summary - 2004 Data

Sample Comments

7/25/2013 - FISH OBSERVED

8/26/2013 - BOTTOM COVERED WITH ALGAE, FISH PRESENT, HOBO IN BAG WITH WATER



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-346

Waterbody: Swift River - Station 346

Town: Roxbury

Log Number: 2221

Subsample Factor: X1

Replicates: 1

Calculated: 3/17/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Perlodidae	09020207	1.00	1.00		--	0.3	0.3
<i>Sweltsa</i>	09020208040	1.00	1.00		PR	0.3	0.3
<i>Centropilum</i>	09020401003	1.00	1.00	2	CG	0.3	0.3
<i>Acentrella</i>	09020401008	1.00	1.00	3	CG	0.3	0.3
<i>Plauditus</i>	09020401012		2.00		CG		0.6
<i>Plauditus cestus</i>	09020401012004	2.00			--	0.6	
Heptageniidae	09020402	2.00	2.00		--	0.6	0.6
<i>Maccaffertium</i>	09020402015	5.00	37.00	4	SC	1.6	11.6
<i>Maccaffertium luteum</i>	09020402015049	32.00			--	10.0	
Leptophlebiidae	09020406	3.00	3.00		--	0.9	0.9
<i>Ephemerella</i>	09020410035	4.00	4.00	1	CG	1.3	1.3
<i>Tricorythodes</i>	09020411038	7.00	7.00	4	CG	2.2	2.2
<i>Neureclipsis</i>	09020603008	3.00	3.00	7	CF	0.9	0.9
<i>Polycentropus</i>	09020603010	1.00	1.00	6	PR	0.3	0.3
<i>Cheumatopsyche</i>	09020604015	10.00	10.00	5	CF	3.1	3.1
<i>Hydropsyche</i>	09020604016	4.00	14.00	4	CF	1.3	4.4
<i>Hydropsyche bronta</i>	09020604016029	8.00			--	2.5	
<i>Hydropsyche slossonae</i>	09020604016031	2.00			--	0.6	
<i>Hydroptila</i>	09020607026	1.00	1.00	6	P	0.3	0.3
<i>Brachycentrus</i>	09020609043		9.00	0	CF		2.8
<i>Brachycentrus appalachia</i>	09020609043096	9.00			--	2.8	
<i>Lepidostoma</i>	09020611064	1.00	1.00	1	SH	0.3	0.3
<i>Psilotreta</i>	09020614068		1.00	0	SC		0.3
<i>Psilotreta indecisa</i>	09020614068132	1.00			--	0.3	
<i>Mystacides</i>	09020618075		1.00	4	CG		0.3
<i>Mystacides sepulchralis</i>	09020618075147	1.00			--	0.3	
<i>Nigronia</i>	09020701003		1.00	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	1.00			--	0.3	
Chironomidae	09021011				--		
<i>Ablabesmyia</i>	09021011001		5.00	8	PR		1.6
<i>Ablabesmyia mallochii</i>	09021011001004	5.00			--	1.6	
<i>Labrundinia</i>	09021011008	4.00	4.00	7	PR	1.3	1.3
<i>Paramerina</i>	09021011013	3.00	3.00		--	0.9	0.9
<i>Rheopelopia</i>	09021011017		4.00		PR		1.3
<i>Rheopelopia acra group</i>	09021011017036	4.00			--	1.3	
<i>Trissopelopia</i>	09021011021		4.00		PR		1.3
<i>Trissopelopia ogemawi</i>	09021011021042	4.00			--	1.3	
<i>Potthastia</i>	09021011026		6.00	2	CG		1.9



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		Actual	Adjusted			Actual	Adjusted
<i>Potthastia gaedii</i>	09021011026045	6.00			--	1.9	
<i>Corynoneura</i>	09021011036	1.00	1.00	7	CG	0.3	0.3
<i>Cricotopus</i>	09021011037	4.00	92.00	7	SH	1.3	28.8
<i>Cricotopus bicinctus</i>	09021011037057	60.00			--	18.8	
<i>Cricotopus vierriensis</i>	09021011037071	24.00			--	7.5	
<i>Cricotopus triannulatus/infuscatus</i>	09021011037078	4.00			SH	1.3	
<i>Orthocladius</i>	09021011050		4.00	6	CG		1.3
<i>Orthocladius annectens</i>	09021011050092	4.00			--	1.3	
<i>Parakiefferiella</i>	09021011052	1.00	1.00		CG	0.3	0.3
<i>Parametriocnemus</i>	09021011053	8.00	8.00	5	CG	2.5	2.5
<i>Psectrocladius</i>	09021011056		12.00	8	CG		3.8
<i>Psectrocladius simulans</i>	09021011056110	12.00			--	3.8	
<i>Rheocricotopus</i>	09021011057	4.00	4.00	6	CG	1.3	1.3
<i>Thienemanniella</i>	09021011062		1.00	6	CG		0.3
<i>Thienemanniella sp. B</i>	09021011062116	1.00			--	0.3	
<i>Paratanytarsus</i>	09021011071		4.00	6	--		1.3
<i>Paratanytarsus dissimilis</i>	09021011071125	4.00			--	1.3	
<i>Tanytarsus</i>	09021011076	24.00	24.00	6	CF	7.5	7.5
<i>Dicrotendipes</i>	09021011085	4.00	4.00	8	CG	1.3	1.3
<i>Microtendipes</i>	09021011094		4.00	6	CF		1.3
<i>Microtendipes pedellus group</i>	09021011094166	4.00			--	1.3	
<i>Polypedilum</i>	09021011102		28.00	6	SH		8.8
<i>Polypedilum aviceps</i>	09021011102181	16.00			--	5.0	
<i>Polypedilum flavum</i>	09021011102182	4.00			--	1.3	
<i>Polypedilum scalaenum group</i>	09021011102189	4.00			--	1.3	
<i>Polypedilum albicorne</i>	09021011102195	4.00			--	1.3	
<i>Hayesomyia</i>	09021011112		4.00		--		1.3
<i>Hayesomyia senata</i>	09021011112001	4.00			--	1.3	
<i>Neoplasta</i>	09021016064				PR		
<i>Unionicola</i>	09030108001	1.00	1.00		--	0.3	0.3