



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

Station Information

Station Number: S-360	DEP Drainage: Androscoggin
Waterbody: Cupsuptic River - Station 360	HUC8: 01040001
Town: Upper Cupsuptic Twp	HUC8 Name: Upper Androscoggin
Directions: 1.5 KM ABOVE BIG FALLS	Latitude: 45 5 57.57 N
	Longitude: 70 53 2.49 W
	Stream Order: 3

Sample Information

Log Number: 1719	Type of Sample: ROCK BAG	Date Deployed: 7/15/2008
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/12/2008

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 5/20/2009
Model Result with P>.6: A	Reason for Determination: Model	
Date Last Calculated: 5/19/2009	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.89	Class A, B, or C	1.00
Class B	0.11	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	1.00
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.00

Model Variables

01 Total Mean Abundance	98.00	18 Relative Abundance Ephemeroptera	0.33
02 Generic Richness	35.00	19 EPT Generic Richness	18.00
03 Plecoptera Mean Abundance	9.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	9.67
04 Ephemeroptera Mean Abundance	32.00	23 Relative Generic Richness- Plecoptera	0.14
05 Shannon-Wiener Generic Diversity	4.12	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.38
06 Hilsenhoff Biotic Index	3.50	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.21	28 EP Generic Richness/14	0.93
08 Relative Generic Richness Diptera	0.31	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	2.63		
11 <i>Cheumatopsyche</i> Abundance	0.38		
12 EPT Generic Richness/ Diptera	1.64		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance	3.67		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	0.00		
(Family Functional Group)			
17 Chironomini Abundance (Family	2.00		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Simulium</i>	16.33
2	<i>Baetis</i>	9.86
3	<i>Micropsectra</i>	9.86
4	<i>Rhithrogena</i>	9.71
5	<i>Ephemerella</i>	8.84



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

Station Number: S-360
Log Number: 1719

Town: Upper Cupsuptic Twp
Waterbody: Cupsuptic River - Station 360

Date Deployed: 7/15/2008
Date Retrieved: 8/12/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 14.5 deg C
Dissolved Oxygen: 9.2 mg/l
Specific Conductance: 15 uS/cm
Velocity: 55 cm/s
pH: 6.39
Wetted Width: 14 m
Bankfull Width: 14 m
Depth: 63 cm

Waterbody Information - Retrieval

Temperature: 12.9 deg C
Dissolved Oxygen: 9.9 mg/l
Specific Conductance: 13 uS/cm
Velocity: 124 cm/s
pH: 6.1
Wetted Width: 14 m
Bankfull Width: 14 m
Depth: 75 cm

Water Chemistry - Retrieval

Ammonia As Nitrogen	<0.01 mg/l	Soluble Reactive Phosphorus	2 ug/l
Nitrate+nitrite As N	0.04 mg/l	Total Phosphorus	0.009 mg/l
Total Kjeldahl Nitrogen	0.2 mg/l	Total Suspended Solids	<2 mg/l
Dissolved Organic Carbon	5.9 mg/l	Total Dissolved Solids	25 mg/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Canopy Open	Mountainous Terrain
Upland Hardwood		

<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>
	Pristine Landscape	Boulder 60 %
		Gravel 20 %
		Rubble/Cobble 15 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	21629	High Int. Dev. %	0.0	Water %	0.0	Non-vegetated %	0.0
Total Land (ac)	21619	Med Int. Dev. %	0.0	Wetland %	3.3	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.3	Upland Woody %	96.4	Human Altered %	0.3
		Development %	0.3	Natural %	99.7	Impervious %	0.0

Sample Comments

HIGH WATER LEVELS; BAG 3 DISTURBED



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

Station Number: S-360		Waterbody: Cupsuptic River - Station 360			Town: Upper Cupsuptic Twp		
Log Number: 1719		Subsample Factor: X1		Replicates: 3	Calculated: 5/19/2009		
Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Nematoda	05	0.33	0.33		--	0.3	0.3
Enchytraeidae	08020201	0.33	0.33		--	0.3	0.3
<i>Stylodrilus</i>	08020203011		0.67		--		0.7
<i>Stylodrilus heringianus</i>	08020203011001	0.67			--	0.7	
<i>Gloioddella</i>	08030101009		0.33		--		0.3
<i>Gloioddella elongata</i>	08030101009001	0.33			--	0.3	
<i>Pteronarcys</i>	09020205023		1.33	0	SH		1.4
<i>Pteronarcys biloba</i>	09020205023061	1.33			--	1.4	
Perlodidae	09020207	0.33	0.33		--	0.3	0.3
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.3	0.3
<i>Sweltsa</i>	09020208040	3.67	3.67		PR	3.7	3.7
<i>Agnetina</i>	09020209050		3.67	2	PR		3.7
<i>Agnetina capitata</i>	09020209050152	3.67		2	PR	3.7	
Baetidae	09020401	0.67	0.67		--	0.7	0.7
<i>Baetis</i>	09020401001		9.67	4	CG		9.9
<i>Baetis flavistriga</i>	09020401001004	0.33			--	0.3	
<i>Baetis tricaudatus</i>	09020401001012	9.33			--	9.5	
Heptageniidae	09020402	0.67			--	0.7	
<i>Epeorus</i>	09020402009	0.33	0.35	0	SC	0.3	0.4
<i>Heptagenia</i>	09020402010		2.47	2	SC		2.5
<i>Heptagenia diabasia</i>	09020402010035	2.33			--	2.4	
<i>Rhithrogena</i>	09020402013	9.00	9.51	0	SC	9.2	9.7
Leptophlebiidae	09020406	0.33	0.33		--	0.3	0.3
<i>Drunella</i>	09020410034		0.33	0	SC		0.3
<i>Drunella lata</i>	09020410034100	0.33			--	0.3	
<i>Ephemerella</i>	09020410035	8.67	8.67	1	CG	8.8	8.8
<i>Dolophilodes</i>	09020601001	0.33	0.33	0	CF	0.3	0.3
Hydropsychidae	09020604	0.33			--	0.3	
<i>Cheumatopsyche</i>	09020604015	0.33	0.38	5	CF	0.3	0.4
<i>Hydropsyche</i>	09020604016	2.00	2.63	4	CF	2.0	2.7
<i>Hydropsyche morosa</i>	09020604016030	0.33			--	0.3	
<i>Rhyacophila</i>	09020605019	2.00	4.33	2	PR	2.0	4.4
<i>Rhyacophila acutiloba</i>	09020605019056	0.33			PR	0.3	
<i>Rhyacophila fuscula</i>	09020605019060	1.67			PR	1.7	
<i>Rhyacophila minor</i>	09020605019063	0.33			PR	0.3	
<i>Brachycentrus</i>	09020609043		0.67	0	CF		0.7
<i>Brachycentrus appalachia</i>	09020609043096	0.67			--	0.7	
<i>Dicranota</i>	09021001005	0.67	0.67	3	PR	0.7	0.7



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

Station Number: S-360	Waterbody: Cupsuptic River - Station 360	Town: Upper Cupsuptic Twp
Log Number: 1719	Subsample Factor: X1	Replicates: 3
		Calculated: 5/19/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Corynoneura</i>	09021011036	0.33	0.33	7	CG	0.3	0.3
<i>Eukiefferiella</i>	09021011041		6.00	8	CG		6.1
<i>Eukiefferiella brevicar group</i>	09021011041074	0.67			--	0.7	
<i>Eukiefferiella claripennis group</i>	09021011041075	5.33			--	5.4	
<i>Parametriocnemus</i>	09021011053	1.00	1.00	5	CG	1.0	1.0
<i>Rheocricotopus</i>	09021011057		0.33	6	CG		0.3
<i>Rheocricotopus eminellobus</i>	09021011057109	0.33			--	0.3	
<i>Thienemanniella</i>	09021011062		0.67	6	CG		0.7
<i>Thienemanniella xena</i>	09021011062110	0.33			--	0.3	
<i>Thienemanniella boltoni</i>	09021011062113	0.33			--	0.3	
<i>Tvetenia</i>	09021011065		0.33	5	CG		0.3
<i>Tvetenia paucunca</i>	09021011065114	0.33			--	0.3	
<i>Micropsectra</i>	09021011070	9.67	9.67	7	CG	9.9	9.9
<i>Polypedilum</i>	09021011102		2.00	6	SH		2.0
<i>Polypedilum aviceps</i>	09021011102181	2.00			--	2.0	
<i>Simulium</i>	09021012047		16.00	4	CF		16.3
<i>Simulium tuberosum</i>	09021012047067	15.67			--	16.0	
<i>Simulium venustum/verecundum complex</i>	09021012047072	0.33			CF	0.3	
<i>Atherix</i>	09021015055	0.67	0.67	2	PR	0.7	0.7
<i>Optioservus</i>	09021113067	4.33	6.67	3	SC	4.4	6.8
<i>Optioservus ovalis</i>	09021113067046	2.33			--	2.4	
<i>Promoresia</i>	09021113069		2.33		--		2.4
<i>Promoresia tardella</i>	09021113069052	2.33			--	2.4	