



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

Station Information

Station Number: S-355	DEP Drainage: Androscoggin
Waterbody: Androscoggin River - Station 355	HUC8: 01040002
Town: Bethel	HUC8 Name: Lower Androscoggin
Directions: RT.2 ; 1.6 KM BELOW CONFLUENCE W/ SUNDAY RIVER	Latitude: 44 28 0.02 N
	Longitude: 70 47 52.23 W
	Stream Order: 6

Sample Information

Log Number: 1743	Type of Sample: ROCK BASKET	Date Deployed: 7/9/2008
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/20/2008

Classification Attainment

Statutory Class: B	Final Determination: B	Date: 3/23/2009
Model Result with P>.6: B	Reason for Determination: Model	
Date Last Calculated: 3/18/2009	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.34	Class A, B, or C	1.00
Class B	0.61	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.12
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.88

Model Variables

01 Total Mean Abundance	600.00	18 Relative Abundance Ephemeroptera	0.14
02 Generic Richness	31.00	19 EPT Generic Richness	17.00
03 Plecoptera Mean Abundance	5.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	84.00	23 Relative Generic Richness- Plecoptera	0.06
05 Shannon-Wiener Generic Diversity	3.12	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	247.20
06 Hilsenhoff Biotic Index	4.26	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	29.33
07 Relative Abundance - Chironomidae	0.09	28 EP Generic Richness/14	0.64
08 Relative Generic Richness Diptera	0.26	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	57.01		
11 <i>Cheumatopsyche</i> Abundance	242.99		
12 EPT Generic Richness/ Diptera Generic Richness	2.13		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	5.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	15.46		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	40.50
2	<i>Chimarra</i>	14.44
3	<i>Hydropsyche</i>	9.50
4	<i>Simulium</i>	7.11
5	<i>Tricorythodes</i>	6.89



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

Station Number: S-355

Town: Bethel

Date Deployed: 7/9/2008

Log Number: 1743

Waterbody: Androscoggin River - Station 355

Date Retrieved: 8/20/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 24.8 deg C
Dissolved Oxygen:
Specific Conductance: 32 uS/cm
Velocity: 22 cm/s
pH: 6.2
Wetted Width: 102 m
Bankfull Width: 103 m
Depth: 89 cm

Waterbody Information - Retrieval

Temperature: 18.4 deg C
Dissolved Oxygen: 8.6 mg/l
Specific Conductance: 30 uS/cm
Velocity: 37 cm/s
pH: 5.95
Wetted Width: 103 m
Bankfull Width: 103 m
Depth: 115 cm

Water Chemistry - Retrieval

Ammonia As Nitrogen	0.02 mg/l	Soluble Reactive Phosphorus	2 ug/l
Nitrate+nitrite As N	0.07 mg/l	Total Phosphorus	0.015 mg/l
Total Kjeldahl Nitrogen	0.2 mg/l	Total Suspended Solids	<2 mg/l
Dissolved Organic Carbon	5.5 mg/l	Total Dissolved Solids	23 mg/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Canopy Open	Rolling Terrain
Urban		

<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Point Source	Gravel	70 %
	Below Town	Rubble/Cobble	10 %
	Main Stem	Sand	20 %

Landcover Summary - 2004 Data

Sample Comments

7/9/08: DO METER WOULDN'T CALIBRATE, SO NO MEASUREMENT WAS TAKEN
RETRIEVAL INITIALLY SCHEDULED FOR 8/6, BUT WATER WAS TOO HIGH; BAG 3 DISTURBED ON
RETRIEVAL



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

Station Number: S-355

Waterbody: Androscoggin River - Station 355

Town: Bethel

Log Number: 1743

Subsample Factor: X4

Replicates: 3

Calculated: 3/18/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002	1.33	1.33		--	0.2	0.2
<i>Orconectes</i>	09010301008		1.33		CG		0.2
<i>Orconectes limosus</i>	09010301008013	1.33			--	0.2	
Perlidae	09020209	1.33	1.33		--	0.2	0.2
<i>Acroneuria</i>	09020209042		4.00	0	PR		0.7
<i>Acroneuria lyctorias</i>	09020209042125	4.00			--	0.7	
<i>Hagenius</i>	09020302008		1.33	1	PR		0.2
<i>Hagenius brevistylus</i>	09020302008015	1.33			--	0.2	
<i>Baetis</i>	09020401001		2.67	4	CG		0.4
<i>Baetis flavistriga</i>	09020401001004	2.67			--	0.4	
<i>Acerpenna</i>	09020401007		2.67	5	CG		0.4
<i>Acerpenna pygmaea</i>	09020401007011	2.67			--	0.4	
<i>Plauditus</i>	09020401012	2.67	2.67		CG	0.4	0.4
<i>Leucrocuta</i>	09020402011	8.00	8.00	1	SC	1.3	1.3
<i>Maccaffertium</i>	09020402015	22.67	25.33	4	SC	3.8	4.2
<i>Maccaffertium luteum</i>	09020402015049	2.67			--	0.4	
<i>Isonychia</i>	09020404018	1.33	1.33	2	CF	0.2	0.2
<i>Tricorythodes</i>	09020411038	41.33	41.33	4	CG	6.9	6.9
Philopotamidae	09020601	1.33			--	0.2	
<i>Dolophilodes</i>	09020601001	1.33	1.35	0	CF	0.2	0.2
<i>Chimarra</i>	09020601003	85.33	86.65	2	CF	14.2	14.4
<i>Neureclipsis</i>	09020603008	1.33	1.33	7	CF	0.2	0.2
<i>Polycentropus</i>	09020603010	8.00	8.00	6	PR	1.3	1.3
Hydropsychidae	09020604	5.33			--	0.9	
<i>Cheumatopsyche</i>	09020604015	238.67	242.99	5	CF	39.8	40.5
<i>Hydropsyche</i>	09020604016	5.33	57.01	4	CF	0.9	9.5
<i>Hydropsyche morosa</i>	09020604016030	42.67			--	7.1	
<i>Hydropsyche depravata-complex</i>	09020604016041	1.33			CF	0.2	
<i>Hydropsyche scalaris-group</i>	09020604016048	6.67			--	1.1	
<i>Pycnopsyche</i>	09020610049	1.33	1.33	4	SH	0.2	0.2
<i>Oecetis</i>	09020618078		2.67	8	PR		0.4
<i>Oecetis persimilis</i>	09020618078157	2.67			--	0.4	
Chironomidae	09021011	2.67			--	0.4	
<i>Rheopelopia</i>	09021011017				PR		
<i>Nanocladius</i>	09021011049		2.81	3	CG		0.5
<i>Nanocladius downesi</i>	09021011049092	2.67			--	0.4	
<i>Rheocricotopus</i>	09021011057		4.22	6	CG		0.7
<i>Rheocricotopus robacki</i>	09021011057105	4.00			--	0.7	



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

Station Number: S-355	Waterbody: Androscoggin River - Station 355	Town: Bethel
Log Number: 1743	Subsample Factor: X4	Replicates: 3
		Calculated: 3/18/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Tvetenia</i>	09021011065		2.81	5	CG		0.5
<i>Tvetenia vitracies</i>	09021011065113	1.33			--	0.2	
<i>Tvetenia paucunca</i>	09021011065114	1.33			--	0.2	
<i>Rheotanytarsus</i>	09021011072	21.33	22.49	6	CF	3.6	3.7
<i>Tanytarsus</i>	09021011076	4.00	4.22	6	CF	0.7	0.7
<i>Microtendipes</i>	09021011094		1.41	6	CF		0.2
<i>Microtendipes rydalensis-grp.</i>	09021011094168	1.33			--	0.2	
<i>Polypedilum</i>	09021011102		14.05	6	SH		2.3
<i>Polypedilum flavum</i>	09021011102182	13.33			--	2.2	
<i>Simulium</i>	09021012047		42.67	4	CF		7.1
<i>Simulium fibrinflatum</i>	09021012047059	1.33			--	0.2	
<i>Simulium jenningsi</i>	09021012047060	17.33			--	2.9	
<i>Simulium tuberosum</i>	09021012047067	1.33			--	0.2	
<i>Simulium jenningsi complex</i>	09021012047070	22.67			CF	3.8	
<i>Psephenus</i>	09021108058		4.00	4	SC		0.7
<i>Psephenus herricki</i>	09021108058028	4.00			--	0.7	
<i>Dubiraphia</i>	09021113064	2.67	2.67	6	CG	0.4	0.4
<i>Stenelmis</i>	09021113070	1.33	4.00	5	SC	0.2	0.7
<i>Stenelmis crenata</i>	09021113070055	2.67			--	0.4	