



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

Station Information

Station Number: S-629	DEP Drainage: Androscoggin
Waterbody: Sabattus River - Station 629	HUC8: 01040002
Town: Sabattus	HUC8 Name: Lower Androscoggin
Directions: 35M DWNSTRM OF RT 126 BRIDGE, SABATTUS POND OUTLET	Latitude: 44 6 46.62 N
	Longitude: 70 6 27.47 W
	Stream Order:

Sample Information

Log Number: 1724	Type of Sample: ROCK BASKET	Date Deployed: 7/18/2008
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/14/2008

Classification Attainment

Statutory Class: C	Final Determination: C	Date: 3/23/2009
Model Result with P>.6: C	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	0.00	Class C	0.95	Class A, B, or C	1.00
Class B	0.04	NA	0.01	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			0.01	Class A	0.00
Class C or Non-Attainment			0.99	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	418.33	18 Relative Abundance Ephemeroptera	0.50
02 Generic Richness	38.00	19 EPT Generic Richness	10.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.36
04 Ephemeroptera Mean Abundance	210.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.14	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	12.34
06 Hilsenhoff Biotic Index	4.73	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	196.33
07 Relative Abundance - Chironomidae	0.16	28 EP Generic Richness/14	0.29
08 Relative Generic Richness Diptera	0.42	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	35.99		
11 <i>Cheumatopsyche</i> Abundance	12.34		
12 EPT Generic Richness/ Diptera Generic Richness	0.63		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.08		
17 Chironomini Abundance (Family Functional Group)	51.35		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	46.93
2	<i>Hydropsyche</i>	8.60
3	<i>Polypedilum</i>	8.33
4	<i>Caecidotea</i>	4.86
5	<i>Chimarra</i>	3.11



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Town: Sabattus

Date Deployed: 7/18/2008

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Waterbody: Sabattus River - Station 629

Date Retrieved: 8/14/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 24.8 deg C
Dissolved Oxygen: 8 mg/l
Specific Conductance: 74 uS/cm
Velocity: 28 cm/s
pH: 6.92
Wetted Width: 10.4 m
Bankfull Width: 12.7 m
Depth: 40 cm

Waterbody Information - Retrieval

Temperature: 20.6 deg C
Dissolved Oxygen: 8.4 mg/l
Specific Conductance: 73 uS/cm
Velocity: 43 cm/s
pH: 7.14
Wetted Width: 12.7 m
Bankfull Width: 12.7 m
Depth: 95 cm

Water Chemistry - Retrieval

Ammonia As Nitrogen	<0.01 mg/l	Soluble Reactive Phosphorus	2 ug/l
Nitrate+nitrite As N	<0.01 mg/l	Total Phosphorus	0.055 mg/l
Total Kjeldahl Nitrogen	0.6 mg/l	Total Suspended Solids	7.7 mg/l
Dissolved Organic Carbon	4.9 mg/l	Total Dissolved Solids	50 mg/l

Summary of Habitat Characteristics

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

<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Agricultural Runoff Stressor	Below Agriculture NPS	Bedrock	5 %
Lake Outlet Stressor	Below Road Crossing	Boulder	5 %
Nutrients Stressor		Clay	5 %
		Detritus	5 %
		Gravel	15 %
		Rubble/Cobble	10 %
		Sand	55 %

Landcover Summary - 2004 Data

Total Area (ac)	21163	High Int. Dev. %	0.3	Water %	10.5	Non-vegetated %	1.5
Total Land (ac)	19153	Med Int. Dev. %	0.8	Wetland %	8.4	Tilled Agriculture %	2.9
		Low Int. Dev. %	5.1	Upland Woody %	66.8	Human Altered %	24.7
		Development %	6.2	Natural %	75.3	Impervious %	4.8

Sample Comments

8/14/08: HIGH WATER FLOW; WATER IS GREEN



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Aquatic Life Taxonomic Inventory Report**

Station Number: S-629	Waterbody: Sabattus River - Station 629	Town: Sabattus
Log Number: 1724	Subsample Factor: X1	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>Mooreobdella</i>	08030301003		0.33		--		0.1
<i>Mooreobdella microstoma</i>	08030301003004	0.33			--	0.1	
<i>Caecidotea</i>	09010101001	6.33	20.33	8	SH	1.5	4.9
<i>Caecidotea racovitzai racovitzai</i>	09010101001002	14.00			--	3.3	
<i>Synurella</i>	09010202006		8.33		--		2.0
<i>Synurella chamberlaini</i>	09010202006001	8.33			--	2.0	
<i>Hyaella</i>	09010203006		2.67	8	CG		0.6
<i>Hyaella azteca</i>	09010203006011	2.67			--	0.6	
<i>Orconectes</i>	09010301008		0.67		CG		0.2
<i>Orconectes virilis</i>	09010301008016	0.67			--	0.2	
<i>Argia</i>	09020309048	9.33	10.67	7	PR	2.2	2.5
<i>Argia moesta</i>	09020309048096	1.33			--	0.3	
<i>Baetis</i>	09020401001	0.33	10.67	4	CG	0.1	2.5
<i>Baetis flavistriga</i>	09020401001004	7.00			--	1.7	
<i>Baetis intercalaris</i>	09020401001008	0.67			--	0.2	
<i>Baetis pluto</i>	09020401001009	2.67			--	0.6	
<i>Stenacron</i>	09020402014		2.67	7	SC		0.6
<i>Stenacron interpunctatum</i>	09020402014045	2.67			--	0.6	
<i>Maccaffertium</i>	09020402015	127.00	196.33	4	SC	30.4	46.9
<i>Maccaffertium modestum</i>	09020402015051	69.33			--	16.6	
<i>Caenis</i>	09020412040	0.33	0.33	7	CG	0.1	0.1
Corixidae	09020501	0.67	0.67		--	0.2	0.2
Philopotamidae	09020601	0.33	0.33		--	0.1	0.1
<i>Chimarra</i>	09020601003	13.00	13.00	2	CF	3.1	3.1
<i>Lype</i>	09020602004		0.33	2	SC		0.1
<i>Lype diversa</i>	09020602004005	0.33			--	0.1	
Hydropsychidae	09020604	1.33			--	0.3	
<i>Cheumatopsyche</i>	09020604015	12.00	12.34	5	CF	2.9	2.9
<i>Hydropsyche</i>	09020604016	6.67	35.99	4	CF	1.6	8.6
<i>Hydropsyche morosa</i>	09020604016030	2.00			--	0.5	
<i>Hydropsyche depravata-complex</i>	09020604016041	26.33			CF	6.3	
<i>Pycnopsyche</i>	09020610049	5.33	5.33	4	SH	1.3	1.3
<i>Nigronia</i>	09020701003		0.33	0	PR		0.1
<i>Nigronia serricornis</i>	09020701003003	0.33			--	0.1	
<i>Anopheles</i>	09021008028	0.33	0.33		CF	0.1	0.1
Chironomidae	09021011	4.67			--	1.1	
<i>Conchapelopia</i>	09021011004	0.33	0.36	6	PR	0.1	0.1
<i>Tanytus</i>	09021011018		0.72	10	PR		0.2



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<i>Tanytus punctipennis</i>	09021011018036	0.67			--	0.2	
<i>Corynoneura</i>	09021011036	0.33	0.36	7	CG	0.1	0.1
<i>Micropsectra</i>	09021011070	0.33	0.36	7	CG	0.1	0.1
<i>Rheotanytarsus</i>	09021011072	11.00	11.85	6	CF	2.6	2.8
<i>Cryptochironomus</i>	09021011082	0.33	0.36	8	PR	0.1	0.1
<i>Endochironomus</i>	09021011087		3.95	10	SH		0.9
<i>Endochironomus subtendens</i>	09021011087157	3.67			--	0.9	
<i>Glyptotendipes</i>	09021011088	5.67	6.10	10	SH	1.4	1.5
<i>Kiefferulus</i>	09021011091	0.33	0.36	10	CG	0.1	0.1
<i>Microtendipes</i>	09021011094		5.03	6	CF		1.2
<i>Microtendipes pedellus-grp.</i>	09021011094166	4.67			--	1.1	
<i>Polypedilum</i>	09021011102		34.83	6	SH		8.3
<i>Polypedilum flavum</i>	09021011102182	32.33			--	7.7	
<i>Stenochironomus</i>	09021011105	0.33	0.36	5	CG	0.1	0.1
<i>Tribelos</i>	09021011107		0.36	5	CG		0.1
<i>Tribelos fuscicorne</i>	09021011107200	0.33			CG	0.1	
<i>Simulium</i>	09021012047		12.33	4	CF		2.9
<i>Simulium fibrinflatum</i>	09021012047059	0.67			--	0.2	
<i>Simulium tuberosum complex</i>	09021012047071	0.67			CF	0.2	
<i>Simulium vittatum complex</i>	09021012047073	11.00			CF	2.6	
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Psephenus</i>	09021108058		12.00	4	SC		2.9
<i>Psephenus herricki</i>	09021108058028	12.00			--	2.9	
<i>Stenelmis</i>	09021113070	4.33	5.67	5	SC	1.0	1.4
<i>Stenelmis crenata</i>	09021113070055	1.33			--	0.3	
<i>Ferrissia</i>	10010204035		1.00		SC		0.2
<i>Ferrissia rivularis</i>	10010204035066	1.00			--	0.2	
Unionidae	10020102	0.33	0.33		CF	0.1	0.1