



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

Station Information

Station Number: S-629	River Basin: Androscoggin
Waterbody: Sabattus River - Station 629	HUC8 Name: Lower Androscoggin
Town: Sabattus	Latitude: 44 6 46.62 N
Directions: 35 M DOWNSTREAM OF RT 126 BRIDGE, SABATTUS POND OUTLET	Longitude: 70 6 27.47 W
	Stream Order: 3

Sample Information

Log Number: 2647	Type of Sample: ROCK BASKET	Date Deployed: 7/10/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/7/2018

Classification Attainment

Statutory Class: C	Final Determination: C	Date: 12/3/2018
Model Result with $P \geq 0.6$: C	Reason for Determination: Model	
Date Last Calculated: 11/30/2018	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.01	Class A, B, or C	1.00
Class B	0.09	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.03	Class A	0.01
Class C or Non-Attainment	0.97	Class B or C or Non-Attainment	0.99

Model Variables

01 Total Mean Abundance	258.33	18 Relative Abundance Ephemeroptera	0.62
02 Generic Richness	46.00	19 EPT Generic Richness	11.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.33
04 Ephemeroptera Mean Abundance	159.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.85	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	6.00
06 Hilsenhoff Biotic Index	4.80	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	136.09
07 Relative Abundance - Chironomidae	0.17	28 EP Generic Richness/14	0.36
08 Relative Generic Richness Diptera	0.35	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	3.00		
11 <i>Cheumatopsyche</i> Abundance	3.67		
12 EPT Generic Richness/ Diptera Generic Richness	0.69		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.67		
17 Chironomini Abundance (Family Functional Group)	15.33		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	52.68
2	<i>Rheotanytarsus</i>	9.16
3	<i>Ferrissia</i>	8.77
4	<i>Stenacron</i>	7.32
5	<i>Synurella</i>	3.23



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Log Number: 2647 Waterbody: Sabattus River - Station 629 Date Retrieved: 8/7/2018

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 24.9 deg C
Dissolved Oxygen: 8.78 mg/l
Dissolved Oxygen Saturation: 105.5 %
Specific Conductance: 105.4 uS/cm
Velocity: 24.4 cm/s
pH: 7.19
Wetted Width: 9.3 m
Bankfull Width: 12.6 m
Depth: 52 cm

Waterbody Information - Retrieval

Temperature: 27.8 deg C
Dissolved Oxygen: 9.57 mg/l
Dissolved Oxygen Saturation: 120.1 %
Specific Conductance: 112.9 uS/cm
Velocity: 24.4 cm/s
pH: 7.3
Wetted Width: 10.7 m
Bankfull Width: 12.6 m
Depth: 53 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Open	Rolling	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Agricultural Runoff	Below Agriculture NPS	Bedrock	5 %
Lake Outlet	Below Road Crossing	Boulder	5 %
Nutrients	Lake Outlet	Detritus	5 %
		Gravel	15 %
		Rubble/Cobble	10 %
		Sand	55 %
		Silt	5 %

Landcover Summary - 2004 Data

Total Area (ac)	21163	High Int. Dev. %	0.3	Water %	9.5	Non-vegetated %	1.3
		Med Int. Dev. %	0.7	Wetland %	7.6	Tilled Agriculture %	2.6
		Low Int. Dev. %	4.7	Upland Woody %	60.5	Grassland %	11.6
		Development %	5.7	Natural %	68.2	Human Altered %	22.3
						Impervious %	4.8

Sample Comments

CRAYFISH, FISH, KINGFISHER



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

Station Number: S-629

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Town: Sabattus

Log Number: 2647

Subsample Factor: X1

Replicates: 3

Calculated: 11/30/2018

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
<i>Girardia</i>	03010102002	0.67	0.67		--	0.3	0.3
<i>Caecidotea</i>	09010101001	3.00	3.00	8	SH	1.2	1.2
<i>Synurella</i>	09010202006	8.33	8.33		--	3.2	3.2
<i>Hyalella</i>	09010203006	2.00	2.00	8	CG	0.8	0.8
Cambaridae	09010301	1.00	1.00		--	0.4	0.4
Coenagrionidae	09020309	0.33	0.33		--	0.1	0.1
<i>Argia</i>	09020309048	2.00	2.00	7	PR	0.8	0.8
Baetidae	09020401	0.33	0.33		--	0.1	0.1
<i>Baetis</i>	09020401001	0.33	3.00	4	CG	0.1	1.2
<i>Baetis flavistriga</i>	09020401001004	2.67			--	1.0	
Heptageniidae	09020402	2.00			--	0.8	
<i>Stenacron</i>	09020402014		18.91	7	SC		7.3
<i>Stenacron interpunctatum</i>	09020402014045	18.67			--	7.2	
<i>Maccaffertium</i>	09020402015	126.00	136.09	4	SC	48.8	52.7
<i>Maccaffertium modestum</i>	09020402015051	8.33			--	3.2	
<i>Caenis</i>	09020412040	0.67	0.67	7	CG	0.3	0.3
<i>Chimarra</i>	09020601003		0.67	2	CF		0.3
<i>Chimarra obscura</i>	09020601003003	0.67			--	0.3	
<i>Cernotina</i>	09020603006	0.33	0.33		PR	0.1	0.1
<i>Cheumatopsyche</i>	09020604015	3.67	3.67	5	CF	1.4	1.4
<i>Hydropsyche</i>	09020604016	0.33	3.00	4	CF	0.1	1.2
<i>Hydropsyche morosa</i>	09020604016030	0.33			--	0.1	
<i>Hydropsyche betteni</i>	09020604016037	2.33			--	0.9	
<i>Hydroptila</i>	09020607026	0.67	0.67	6	P	0.3	0.3
<i>Oecetis</i>	09020618078	0.33	0.33	8	PR	0.1	0.1
<i>Ablabesmyia</i>	09021011001	0.67	0.67	8	PR	0.3	0.3
<i>Procladius</i>	09021011015	0.33	0.33	9	PR	0.1	0.1
<i>Thienemannimyia</i>	09021011020		0.67	3	PR		0.3
<i>Thienemannimyia group</i>	09021011020041	0.67			--	0.3	
<i>Cricotopus</i>	09021011037	0.33	0.33	7	SH	0.1	0.1
<i>Eukiefferiella</i>	09021011041		0.33	8	CG		0.1
<i>Eukiefferiella devonica group</i>	09021011041083	0.33			CG	0.1	
<i>Thienemanniella</i>	09021011062	0.33	0.33	6	CG	0.1	0.1
<i>Rheotanytarsus</i>	09021011072		23.67	6	CF		9.2
<i>Rheotanytarsus exiguus group</i>	09021011072127	23.67			CF	9.2	
<i>Stempellina</i>	09021011073	0.33	0.33	2	CG	0.1	0.1
<i>Tanytarsus</i>	09021011076	1.33	1.33	6	CF	0.5	0.5



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		Actual	Adjusted			Actual	Adjusted
<i>Pseudochironomus</i>	09021011078	0.33	0.33	5	CG	0.1	0.1
<i>Dicrotendipes</i>	09021011085	0.33	0.33	8	CG	0.1	0.1
<i>Microtendipes</i>	09021011094		6.33	6	CF		2.5
<i>Microtendipes pedellus group</i>	09021011094166	6.33			--	2.5	
<i>Polypedilum</i>	09021011102		7.33	6	SH		2.8
<i>Polypedilum flavum</i>	09021011102182	7.33			--	2.8	
<i>Stenochironomus</i>	09021011105	0.67	0.67	5	CG	0.3	0.3
<i>Tribelos</i>	09021011107	0.33	0.33	5	CG	0.1	0.1
<i>Simulium</i>	09021012047	0.33	0.33	4	CF	0.1	0.1
<i>Psephenus</i>	09021108058		0.33	4	SC		0.1
<i>Psephenus herricki</i>	09021108058028	0.33			--	0.1	
<i>Macronychus</i>	09021113065		1.33	4	--		0.5
<i>Macronychus glabratus</i>	09021113065040	1.33			--	0.5	
<i>Microcyloepus</i>	09021113066		0.33	3	--		0.1
<i>Microcyloepus pusillus</i>	09021113066041	0.33			--	0.1	
<i>Hygrobates</i>	09030102001	0.67	0.67		--	0.3	0.3
<i>Lebertia</i>	09030105001	0.33	0.33		--	0.1	0.1
<i>Sperchon</i>	09030107001	0.33	0.33		--	0.1	0.1
Cladocera	090504	0.67	0.67		--	0.3	0.3
<i>Campeloma</i>	10010102004		0.33		SC		0.1
<i>Campeloma decisum</i>	10010102004009	0.33			--	0.1	
<i>Helisoma</i>	10010203030	2.00	2.00		SC	0.8	0.8
<i>Menetus</i>	10010203031		0.33		--		0.1
<i>Menetus dilatatus</i>	10010203031059	0.33			--	0.1	
<i>Ferrissia</i>	10010204035	22.67	22.67		SC	8.8	8.8
<i>Musculium</i>	10020201001	0.33	0.33		CF	0.1	0.1