



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

Station Information

Station Number: S-43	River Basin: Androscoggin
Waterbody: Little Androscoggin River - Station 43	HUC8 Name: Lower Androscoggin
Town: Paris	Latitude: 44 12 43.12 N
Directions: 45 M ABOVE POTW	Longitude: 70 30 58.75 W
	Stream Order: 4

Sample Information

Log Number: 2662	Type of Sample: ROCK BASKET	Date Deployed: 7/18/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/15/2018

Classification Attainment

Statutory Class: C	Final Determination: A	Date: 2/8/2019
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 2/5/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.85	Class C	0.00
Class B	0.14	NA	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	103.00	18 Relative Abundance Ephemeroptera	0.50
02 Generic Richness	47.00	19 EPT Generic Richness	27.00
03 Plecoptera Mean Abundance	5.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	51.00	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	4.59	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	9.33
06 Hilsenhoff Biotic Index	4.29	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	22.67
07 Relative Abundance - Chironomidae	0.19	28 EP Generic Richness/14	1.00
08 Relative Generic Richness Diptera	0.26	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	5.33		
11 <i>Cheumatopsyche</i> Abundance	6.67		
12 EPT Generic Richness/ Diptera Generic Richness	2.25		
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance (Family Functional Group)	5.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	4.33		
17 Chironomini Abundance (Family Functional Group)	4.00		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	17.48
2	<i>Acerpenna</i>	9.56
3	<i>Stenacron</i>	8.41
4	<i>Cheumatopsyche</i>	6.47
5	<i>Rheotanytarsus</i>	6.47



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

Station Number: S-43 Town: Paris Date Deployed: 7/18/2018
Log Number: 2662 Waterbody: Little Androscoggin River - Station 43 Date Retrieved: 8/15/2018

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 22.7 deg C
Dissolved Oxygen: 8.99 mg/l
Dissolved Oxygen Saturation: 104.2 %
Specific Conductance: 134.5 uS/cm
Velocity: 21.3 cm/s
pH: 6.96
Wetted Width: 20 m
Bankfull Width: 22 m
Depth: 67 cm

Waterbody Information - Retrieval

Temperature: 23.1 deg C
Dissolved Oxygen: 9.44 mg/l
Dissolved Oxygen Saturation: 109.9 %
Specific Conductance: 105.8 uS/cm
Velocity: 12.2 cm/s
pH: 6.86
Wetted Width: 22 m
Bankfull Width: 22 m
Depth: 87 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Open	Rolling
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Above Point Source	Gravel 40 %
	Above POTW	Rubble/Cobble 40 %
	Main Stem	Sand 20 %

Landcover Summary - 2004 Data

Total Area (ac) 21148	High Int. Dev. % 1.0	Water % 0.6	Non-vegetated % 0.3
	Med Int. Dev. % 1.1	Wetland % 1.5	Tilled Agriculture % 1.3
	Low Int. Dev. % 3.7	Upland Woody % 82.5	Grassland % 7.5
	Development % 5.8	Natural % 84.1	Human Altered % 15.3
			Impervious % 4.7

Sample Comments

Fish, crayfish, brick/glass/plastics



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

Station Number: S-43

Waterbody: Little Androscoggin River - Station 43

Town: Paris

Log Number: 2662

Subsample Factor: X1

Replicates: 3

Calculated: 2/5/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Enchytraeidae	08020201	0.33	0.33		--	0.3	0.3
<i>Dero</i>	08020202007	0.33	0.33		CG	0.3	0.3
<i>Orconectes</i>	09010301008	0.67	0.67		CG	0.6	0.6
<i>Acroneuria</i>	09020209042		4.67	0	PR		4.5
<i>Acroneuria lycorias</i>	09020209042125	4.67			--	4.5	
<i>Perlesta</i>	09020209046	0.33	0.33	5	PR	0.3	0.3
<i>Boyeria</i>	09020301004		1.33	2	PR		1.3
<i>Boyeria vinosa</i>	09020301004012	1.33			--	1.3	
<i>Hagenius</i>	09020302008		0.67	1	PR		0.6
<i>Hagenius brevistylus</i>	09020302008015	0.67			PR	0.6	
<i>Argia</i>	09020309048	0.33	0.33	7	PR	0.3	0.3
Baetidae	09020401	0.33			--	0.3	
<i>Baetis</i>	09020401001		1.02	4	CG		1.0
<i>Baetis flavistriga</i>	09020401001004	0.33			--	0.3	
<i>Baetis intercalaris</i>	09020401001008	0.67			--	0.6	
<i>Centroptilum</i>	09020401003	0.67	0.68	2	CG	0.6	0.7
<i>Acerpenna</i>	09020401007		9.85	5	CG		9.6
<i>Acerpenna pygmaea</i>	09020401007011	9.67			--	9.4	
<i>Labiobaetis</i>	09020401009	0.33	0.34		--	0.3	0.3
<i>Procloeon</i>	09020401010	4.33	4.41		CG	4.2	4.3
<i>Iswaeon</i>	09020401015		2.04		--		2.0
<i>Iswaeon anoka</i>	09020401015001	2.00			--	1.9	
<i>Leucrocuta</i>	09020402011	2.00	2.00	1	SC	1.9	1.9
<i>Stenacron</i>	09020402014		8.67	7	SC		8.4
<i>Stenacron interpunctatum</i>	09020402014045	8.67			--	8.4	
<i>Maccaffertium</i>	09020402015	11.67	18.00	4	SC	11.3	17.5
<i>Maccaffertium modestum</i>	09020402015051	2.00			--	1.9	
<i>Maccaffertium vicarium</i>	09020402015055	4.33			--	4.2	
<i>Isonychia</i>	09020404018	2.00	2.00	2	CF	1.9	1.9
<i>Ephemerella</i>	09020410035	1.33	1.33	1	CG	1.3	1.3
<i>Tricorythodes</i>	09020411038	0.67	0.67	4	CG	0.6	0.6
Philopotamidae	09020601	0.33	0.33		--	0.3	0.3
<i>Chimarra</i>	09020601003	0.67	1.00	2	CF	0.6	1.0
<i>Chimarra obscura</i>	09020601003003	0.33			--	0.3	
Polycentropodidae	09020603	0.33	0.33		--	0.3	0.3
<i>Cheumatopsyche</i>	09020604015	6.67	6.67	5	CF	6.5	6.5
<i>Hydropsyche</i>	09020604016	2.00	5.33	4	CF	1.9	5.2



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

Station Number: S-43 Waterbody: Little Androscoggin River - Station 43 Town: Paris
Log Number: 2662 Subsample Factor: X1 Replicates: 3 Calculated: 2/5/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Hydropsyche bronta</i>	09020604016029	1.00			--	1.0	
<i>Hydropsyche morosa</i>	09020604016030	0.33			--	0.3	
<i>Hydropsyche sparna</i>	09020604016032	0.33			--	0.3	
<i>Hydropsyche scalaris species group</i>	09020604016048	1.67			--	1.6	
<i>Macrostemum</i>	09020604018	0.33	0.33	3	CF	0.3	0.3
<i>Rhyacophila</i>	09020605019		1.67	2	PR		1.6
<i>Rhyacophila minora</i>	09020605019063	1.67			PR	1.6	
<i>Hydroptila</i>	09020607026	0.33	0.33	6	P	0.3	0.3
<i>Brachycentrus</i>	09020609043		2.00	0	CF		1.9
<i>Brachycentrus appalachia</i>	09020609043096	2.00			--	1.9	
<i>Pycnopsyche</i>	09020610049	0.67	0.67	4	SH	0.6	0.6
<i>Ceraclea</i>	09020618072	1.00	1.00	3	CG	1.0	1.0
<i>Mystacides</i>	09020618075		0.67	4	CG		0.6
<i>Mystacides sepulchralis</i>	09020618075147	0.67			--	0.6	
<i>Oecetis</i>	09020618078	1.67	1.67	8	PR	1.6	1.6
Chironomidae	09021011				--		
<i>Ablabesmyia</i>	09021011001	0.33	0.33	8	PR	0.3	0.3
<i>Nilotanytus</i>	09021011012		1.33	6	PR		1.3
<i>Nilotanytus fimbriatus</i>	09021011012027	1.33			--	1.3	
<i>Pentaneura</i>	09021011014	0.67	0.67	6	PR	0.6	0.6
<i>Thienemannimyia</i>	09021011020		2.00	3	PR		1.9
<i>Thienemannimyia group</i>	09021011020041	2.00			--	1.9	
<i>Brillia</i>	09021011033	0.33	0.33	5	SH	0.3	0.3
<i>Cricotopus</i>	09021011037		2.00	7	SH		1.9
<i>Cricotopus bicinctus</i>	09021011037057	2.00			--	1.9	
<i>Nanocladius</i>	09021011049	2.00	2.00	3	CG	1.9	1.9
<i>Rheotanytarsus</i>	09021011072		6.67	6	CF		6.5
<i>Rheotanytarsus exiguus group</i>	09021011072127	6.67			CF	6.5	
<i>Tanytarsus</i>	09021011076	0.33	0.33	6	CF	0.3	0.3
<i>Microtendipes</i>	09021011094		2.33	6	CF		2.3
<i>Microtendipes rydalensis group</i>	09021011094168	2.33			--	2.3	
<i>Polypedilum</i>	09021011102		1.67	6	SH		1.6
<i>Polypedilum aviceps</i>	09021011102181	1.00			--	1.0	
<i>Polypedilum flavum</i>	09021011102182	0.67			--	0.6	
<i>Simulium</i>	09021012047			4	CF		
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.3	0.3
Empididae	09021016			6	--		
<i>Psephenus</i>	09021108058		1.00	4	SC		1.0



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

Station Number: S-43	Waterbody: Little Androscoggin River - Station 43	Town: Paris
Log Number: 2662	Subsample Factor: X1	Replicates: 3
		Calculated: 2/5/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Psephenus herricki</i>	09021108058028	1.00			--	1.0	
<i>Dubiraphia</i>	09021113064	0.33	0.33	6	--	0.3	0.3