



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

Station Information

Station Number:	S-357	River Basin:	Androscoggin
Waterbody:	Bobbin Mill Brook - Station 357	HUC8 Name:	Lower Androscoggin
Town:	Auburn	Latitude:	44 7 13.51 N
Directions:	ABOVE RIVER RD. CROSSING	Longitude:	70 12 54.65 W
		Stream Order:	2

Sample Information

Log Number:	2675	Type of Sample:	ROCK BAG	Date Deployed:	7/26/2018
Subsample Factor:	X1	Replicates:	1	Date Retrieved:	8/23/2018

Classification Attainment

Statutory Class:	B	Final Determination:	I	Date:	3/29/2019
Model Result with $P \geq 0.6$:	I	Reason for Determination:	Best Professional Judgement		
Date Last Calculated:	3/29/2019	Comments:	Samplers Disturbed.		

Model Probabilities

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

Model Variables

01 Total Mean Abundance	9.00	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	7.00	19 EPT Generic Richness	2.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	1.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.64	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.00
06 Hilsenhoff Biotic Index	4.00	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	1.00
07 Relative Abundance - Chironomidae	0.00	28 EP Generic Richness/14	0.07
08 Relative Generic Richness Diptera	0.14	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	2.00		

Five Most Dominant Taxa

13 Relative Abundance - Oligochaeta	0.00	Rank	Taxon Name	Percent
15 Perlidae Mean Abundance (Family Functional Group)	0.00	1	<i>Ferrissia</i>	33.33
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00	2	<i>Cambaridae</i>	11.11
17 Chironomini Abundance (Family Functional Group)	0.00	3	<i>Maccaffertium</i>	11.11
		4	<i>Pycnopsyche</i>	11.11
		5	<i>Tipula</i>	11.11
		6	<i>Psephenus</i>	11.11
		7	<i>Promoresia</i>	11.11



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Biological Monitoring Program
Aquatic Life Classification Attainment Report**

Station Number: S-357	Town: Auburn	Date Deployed: 7/26/2018
Log Number: 2675	Waterbody: Bobbin Mill Brook - Station 357	Date Retrieved: 8/23/2018

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	21.7 deg C
Dissolved Oxygen:	9.51 mg/l
Dissolved Oxygen Saturation:	107.5 %
Specific Conductance:	332.8 uS/cm
Velocity:	33.5 cm/s
pH:	7.97
Wetted Width:	11.2 m
Bankfull Width:	12.5 m
Depth:	30 cm

Waterbody Information - Retrieval

Temperature:	17.9 deg C
Dissolved Oxygen:	10.59 mg/l
Dissolved Oxygen Saturation:	110.8 %
Specific Conductance:	407.6 uS/cm
Velocity:	18.3 cm/s
pH:	8.21
Wetted Width:	10.4 m
Bankfull Width:	12.5 m
Depth:	18 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Partly Open	Rolling
Upland Hardwood		
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Agricultural Runoff	Above Confluence	Boulder 5 %
Lake Outlet	Lake Outlet	Gravel 20 %
		Rubble/Cobble 50 %
		Sand 20 %
		Silt 5 %

Landcover Summary - 2004 Data

Total Area (ac)	976	High Int. Dev. %	12.0	Water %	0.0	Non-vegetated %	0.0
		Med Int. Dev. %	3.8	Wetland %	4.9	Tilled Agriculture %	6.3
		Low Int. Dev. %	4.5	Upland Woody %	45.8	Grassland %	10.5
		Development %	20.3	Natural %	50.7	Human Altered %	49.3
						Impervious %	20.1

Sample Comments

CRAYFISH



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

Station Number: S-357

Waterbody: Bobbin Mill Brook - Station 357

Town: Auburn

Log Number: 2675

Subsample Factor: X1

Replicates: 1

Calculated: 3/29/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Cambaridae	09010301	1.00	1.00		--	11.1	11.1
<i>Maccaffertium</i>	09020402015		1.00	4	SC		11.1
<i>Maccaffertium modestum</i>	09020402015051	1.00			--	11.1	
<i>Hydropsyche</i>	09020604016			4	CF		
<i>Pycnopsyche</i>	09020610049	1.00	1.00	4	SH	11.1	11.1
<i>Tipula</i>	09021001002	1.00	1.00	4	SH	11.1	11.1
<i>Psephenus</i>	09021108058		1.00	4	SC		11.1
<i>Psephenus herricki</i>	09021108058028	1.00			--	11.1	
<i>Promoresia</i>	09021113069		1.00		--		11.1
<i>Promoresia tardella</i>	09021113069052	1.00			--	11.1	
<i>Ferrissia</i>	10010204035	3.00	3.00		SC	33.3	33.3