



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

Station Information

Station Number: S-693	DEP Drainage: Androscoggin
Waterbody: Martin Stream - Station 693	HUC8: 01040002
Town: Turner	HUC8 Name: Lower Androscoggin
Directions: 35 METERS BELOW RT. 117 BRIDGE CROSSING	Latitude: 44 15 33.89 N
	Longitude: 70 17 30.41 W
	Stream Order:

Sample Information

Log Number: 1717	Type of Sample: ROCK BAG	Date Deployed: 7/21/2008
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/18/2008

Classification Attainment

Statutory Class: B	Final Determination: B	Date: 5/20/2009
Model Result with P>.6: B	Reason for Determination: Model	
Date Last Calculated: 5/19/2009	Comments: Indeterminant Class A (.49) not raised to Class A based on sensitive taxa present.	

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.65	Class C	0.01	Class A, B, or C	1.00
Class B	0.34	NA	0.00	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			0.99	Class A	0.47
Class C or Non-Attainment			0.01	Class B or C or Non-Attainment	0.53

Model Variables

01 Total Mean Abundance	162.00	18 Relative Abundance Ephemeroptera	0.22
02 Generic Richness	27.00	19 EPT Generic Richness	11.00
03 Plecoptera Mean Abundance	9.50	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	2.00
04 Ephemeroptera Mean Abundance	35.50	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	2.90	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	4.05
06 Hilsenhoff Biotic Index	3.85	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	13.62
07 Relative Abundance - Chironomidae	0.08	28 EP Generic Richness/14	0.43
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	75.95		
11 <i>Cheumatopsyche</i> Abundance	4.05		
12 EPT Generic Richness/ Diptera Generic Richness	1.22		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	9.50		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	0.00		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	46.88
2	<i>Baetis</i>	13.58
3	<i>Maccaffertium</i>	7.72
4	<i>Simulium</i>	5.56
5	<i>Attaneuria</i>	5.17



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Date Retrieved: 8/18/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 20.1 deg C
Dissolved Oxygen: 7.5 mg/l
Specific Conductance: 109 uS/cm
Velocity: 59 cm/s
pH: 6.71
Wetted Width: 13.4 m
Bankfull Width: 13.4 m
Depth: 35 cm

Waterbody Information - Retrieval

Temperature: 19.2 deg C
Dissolved Oxygen: 8.2 mg/l
Specific Conductance: 66 uS/cm
Velocity: 86 cm/s
pH: 6.46
Wetted Width: 13.4 m
Bankfull Width: 13.4 m
Depth: 53 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Cultivated

Pasture

Upland Hardwood

Canopy Cover

Canopy Partly Open

Terrain

Rolling Terrain

Stressor

Agricultural Runoff Stressor

Location

Below Agriculture NPS

Below Road Crossing

Main Stem

Substrate

Boulder 15 %

Gravel 15 %

Rubble/Cobble 55 %

Sand 10 %

Silt 5 %

Landcover Summary - 2004 Data

Sample Comments

1 BAG LOST



Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report

Station Number: S-693

Waterbody: Martin Stream - Station 693

Town: Turner

Log Number: 1717

Subsample Factor: X1

Replicates: 2

Calculated: 5/19/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Dugesidae	03010102	0.50	0.50		--	0.3	0.3
<i>Synurella</i>	09010202006		0.50		--		0.3
<i>Synurella chamberlaini</i>	09010202006001	0.50			--	0.3	
Perlidae	09020209	1.00			--	0.6	
<i>Acroneuria</i>	09020209042	0.50	1.12	0	PR	0.3	0.7
<i>Acroneuria lyctorias</i>	09020209042125	0.50			--	0.3	
<i>Attaneuria</i>	09020209043		8.38	1	--		5.2
<i>Attaneuria ruralis</i>	09020209043128	7.50			--	4.6	
<i>Boyeria</i>	09020301004		0.50	2	PR		0.3
<i>Boyeria vinosa</i>	09020301004012	0.50			--	0.3	
<i>Baetis</i>	09020401001		22.00	4	CG		13.6
<i>Baetis flavistriga</i>	09020401001004	2.00			--	1.2	
<i>Baetis tricaudatus</i>	09020401001012	20.00			--	12.3	
<i>Epeorus</i>	09020402009	0.50	0.50	0	SC	0.3	0.3
<i>Maccaffertium</i>	09020402015	11.50	12.50	4	SC	7.1	7.7
<i>Maccaffertium modestum</i>	09020402015051	1.00			--	0.6	
Ephemerellidae	09020410	0.50	0.50		--	0.3	0.3
<i>Chimarra</i>	09020601003	6.50	6.50	2	CF	4.0	4.0
Hydropsychidae	09020604	1.00			--	0.6	
<i>Cheumatopsyche</i>	09020604015	4.00	4.05	5	CF	2.5	2.5
<i>Hydropsyche</i>	09020604016	15.50	75.95	4	CF	9.6	46.9
<i>Hydropsyche bronta</i>	09020604016029	3.50			--	2.2	
<i>Hydropsyche morosa</i>	09020604016030	17.00			--	10.5	
<i>Hydropsyche sparna</i>	09020604016032	28.00			--	17.3	
<i>Hydropsyche depravata complex</i>	09020604016041	11.00			CF	6.8	
<i>Glossosoma</i>	09020606020			0	SC		
<i>Pycnopsyche</i>	09020610049	0.50	0.50	4	SH	0.3	0.3
<i>Oecetis</i>	09020618078		0.50	8	PR		0.3
<i>Oecetis avara</i>	09020618078153	0.50			--	0.3	
<i>Nigronia</i>	09020701003		0.50	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	0.50			--	0.3	
<i>Antocha</i>	09021001004	1.00	1.00	3	CG	0.6	0.6
<i>Cardiocladius</i>	09021011034		0.50	5	PR		0.3
<i>Cardiocladius obscurus</i>	09021011034053	0.50			--	0.3	
<i>Nanocladius</i>	09021011049		2.00	3	CG		1.2
<i>Nanocladius branchicolus</i>	09021011049091	2.00			--	1.2	
<i>Parametriocnemus</i>	09021011053	0.50	0.50	5	CG	0.3	0.3
<i>Tvetenia</i>	09021011065		1.00	5	CG		0.6



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		Actual	Adjusted			Actual	Adjusted
<i>Tvetenia paucunca</i>	09021011065114	1.00			--	0.6	
<i>Micropsectra</i>	09021011070	2.00	2.00	7	CG	1.2	1.2
<i>Rheotanytarsus</i>	09021011072	7.00	7.00	6	CF	4.3	4.3
<i>Simulium</i>	09021012047		9.00	4	CF		5.6
<i>Simulium fibrinflatum</i>	09021012047059	3.50			--	2.2	
<i>Simulium penobscotensis</i>	09021012047063	1.00			--	0.6	
<i>Simulium tuberosum</i>	09021012047067	2.00			--	1.2	
<i>Simulium jenningsi complex</i>	09021012047070	2.50			CF	1.5	
<i>Simulium venustum/verecundum complex</i>	09021012047072				CF		
Empididae	09021016			6	--		
<i>Hemerodromia</i>	09021016057	0.50	0.50	3	PR	0.3	0.3
<i>Psephenus</i>	09021108058		1.50	4	SC		0.9
<i>Psephenus herricki</i>	09021108058028	1.50			--	0.9	
<i>Promoresia</i>	09021113069		0.50		--		0.3
<i>Promoresia tardella</i>	09021113069052	0.50			--	0.3	
<i>Ferrissia</i>	10010204035		2.00		SC		1.2
<i>Ferrissia rivularis</i>	10010204035066	2.00			--	1.2	