

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

Station Information

Station Number: S341	DEP Drainage: Androscoggin
Waterbody: Dill Brook	HUC Code: 01040002
Town: LEWISTON	HUC Name: Lower Androscoggin
Directions: Below Goddard Rd. crossing	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 1

Sample Information

Log Number: 1227	Type of Sample: Riffle Bags	Date Deployed: 16-JUL-03
Subsample Factor: X1	Replicates: 3	Date Retrieved: 13-AUG-03

Classification Attainment

Statutory Class: B	Final Determination: C	
Model Result with P > .6: C	Reason for Determination: Model	
Date Last Calculated:		

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.92
Class B	0.01	Non-Attainment	0.08
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.00	Class A	0.00
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Abundance of Individuals	347.00	18 Relative Abundance - Ephemeroptera	0.05
02 Generic Richness	41.00	19 EPT Generic Richness	7.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	38.00
04 Ephemeroptera Abundance	17.33	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	3.52	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	6.30	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	135.00
07 Relative Abundance - Chironomidae	0.80	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.49	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	0.00
09 <i>Hydropsyche</i> Abundance	1.00	28 EP Generic Richness/14	0.14
11 <i>Cheumatopsyche</i> Abundance	0.00	30 Presence of Class A Indicator Taxa/7	0.00
12 EPT Generic Richness/ Diptera Generic Richness	0.35		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.10	1	Tanytarsus	33.43
15 Perlidae Abundance (Family Functional Group)	0.00	2	Paratanytarsus	12.78
16 Tanypodinae Abundance (Family Functional Group)	18.00	3	Dicrotendipes	10.95
17 Chironomini Abundance (Family Functional Group)	58.33	4	Limnodrilus	8.39
		5	Cricotopus	5.48

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Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Michael Winnell

Waterbody Information

Water Temperature:	18.9 °C	Specific Conductance	916.0 uS/cm	Channel Width:	4.0 m
Velocity:	21 cm/s	Dissolved Oxygen:	5.6 ppm	Channel Depth:	15.0 cm

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Upland Hardwood Urban	Partly Open		Below Road Crossing

Substrate

Rubble	Gravel	Sand
30%	25%	45%

Comments about the Station or Sample

8/13/03 Data;
Flow: not recorded; Depth: 25cm; Temp: 20.1C; SPC: 412uS/cm; DO: 7.6mg/L; pH: 7.22

Comments about the Final Determination

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Log Number: 1227 **Subsample:** X1 **Replicates:** 3 **Calculated:**

BioME Aquatic Life Taxonomic Inventory Report

Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Eclipidrilus</i>	08020101003	1.00	1.00		--	0.3	0.3
<i>Enchytraeidae</i>	08020201	1.00	1.00		--	0.3	0.3
<i>Tubificidae</i>	08020203	22.00	0.00		--	6.3	0.0
<i>Aulodrilus</i>	08020203001	0.00	1.12		--	0.0	0.3
<i>Aulodrilus limnobius</i>	08020203001002	0.33	0.00		--	0.1	0.0
<i>Limnodrilus</i>	08020203005	0.00	29.10		CG	0.0	8.4
<i>Limnodrilus hoffmeisteri</i>	08020203005003	8.67	0.00		--	2.5	0.0
<i>Tubifex</i>	08020203008	0.00	1.12		CG	0.0	0.3
<i>Tubifex tubifex</i>	08020203008002	0.33	0.00		--	0.1	0.0
<i>Caecidotea</i>	09010101001	0.33	0.33	8	SH	0.1	0.1
<i>Boyeria</i>	09020301004	0.00	1.00	2	PR	0.0	0.3
<i>Boyeria vinosa</i>	09020301004012	1.00	0.00		--	0.3	0.0
<i>Baetis</i>	09020401001	0.00	1.00	4	CG	0.0	0.3
<i>Baetis flavistriga</i>	09020401001004	1.00	0.00		--	0.3	0.0
<i>Caenis</i>	09020412040	16.33	16.33	7	CG	4.7	4.7
<i>Ceratomyza</i>	09020603006	0.33	0.33		PR	0.1	0.1
<i>Nyctiophylax</i>	09020603009	0.00	1.33	5	PR	0.0	0.4
<i>Nyctiophylax moestus</i>	09020603009013	1.33	0.00		--	0.4	0.0
<i>Hydropsyche</i>	09020604016	0.67	1.00	4	CF	0.2	0.3
<i>Hydropsyche depravata-complex</i>	09020604016041	0.33	0.00		CF	0.1	0.0
<i>Hydroptila</i>	09020607026	0.33	0.33	6	P	0.1	0.1
<i>Oecetis</i>	09020618078	0.33	0.33	8	PR	0.1	0.1
<i>Tipula</i>	09021001002	1.33	1.33	4	SH	0.4	0.4
<i>Conchapelopia</i>	09021011004	1.00	1.00	6	PR	0.3	0.3
<i>Meropelopia</i>	09021011010	4.67	4.67		--	1.3	1.3
<i>Thienemannimyia</i>	09021011020	12.33	12.33	3	PR	3.6	3.6
<i>Cricotopus</i>	09021011037	1.67	19.00	7	SH	0.5	5.5
<i>Cricotopus bicinctus</i>	09021011037057	0.33	0.00		--	0.1	0.0
<i>Cricotopus sylvestris</i>	09021011037067	1.33	0.00		--	0.4	0.0
<i>Cricotopus vierriensis</i>	09021011037071	9.67	0.00		--	2.8	0.0
<i>Cricotopus annulator-complex</i>	09021011037074	6.00	0.00		--	1.7	0.0
<i>Orthocladus</i>	09021011050	0.33	0.33	6	CG	0.1	0.1
<i>Parakiefferiella</i>	09021011052	14.33	14.33		CG	4.1	4.1
<i>Paratanytarsus</i>	09021011071	44.33	44.33	6	--	12.8	12.8
<i>Rheotanytarsus</i>	09021011072	6.33	6.33	6	CF	1.8	1.8
<i>Tanytarsus</i>	09021011076	18.33	116.00	6	CF	5.3	33.4
<i>Tanytarsus glabrescens</i>	09021011076134	97.67	0.00		--	28.1	0.0

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		Actual	Adjusted			Actual	Adjusted
<i>Cryptochironomus</i>	09021011082	0.67	0.67	8	PR	0.2	0.2
<i>Dicrotendipes</i>	09021011085	34.00	38.00	8	CG	9.8	11.0
<i>Dicrotendipes neomodestus</i>	09021011085152	4.00	0.00		--	1.2	0.0
<i>Paratendipes</i>	09021011100	0.00	5.33	8	CG	0.0	1.5
<i>Paratendipes albimanus-grp.</i>	09021011100176	5.33	0.00		--	1.5	0.0
<i>Phaenopsectra</i>	09021011101	0.00	3.00	7	SC	0.0	0.9
<i>Phaenopsectra obediens-grp.</i>	09021011101180	3.00	0.00		--	0.9	0.0
<i>Polypedilum</i>	09021011102	0.00	8.67	6	SH	0.0	2.5
<i>Polypedilum flavum</i>	09021011102182	1.67	0.00		--	0.5	0.0
<i>Polypedilum illinoense-grp.</i>	09021011102185	1.33	0.00		--	0.4	0.0
<i>Polypedilum laetum</i>	09021011102186	1.33	0.00		--	0.4	0.0
<i>Polypedilum scalaenum-grp.</i>	09021011102189	3.00	0.00		--	0.9	0.0
<i>Polypedilum halterale-grp.</i>	09021011102193	1.33	0.00		--	0.4	0.0
<i>Stictochironomus</i>	09021011106	2.67	2.67	9	CG	0.8	0.8
<i>Hayesomyia</i>	09021011112	0.00	2.67		--	0.0	0.8
<i>Hayesomyia senata</i>	09021011112001	2.67	0.00		--	0.8	0.0
<i>Simuliidae</i>	09021012	0.33	0.33		--	0.1	0.1
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Chelifera</i>	09021016060	0.33	0.33		--	0.1	0.1
<i>Dubiraphia</i>	09021113064	0.33	0.33	6	CG	0.1	0.1
<i>Stenelmis</i>	09021113070	0.67	2.00	5	SC	0.2	0.6
<i>Stenelmis crenata</i>	09021113070055	1.33	0.00		--	0.4	0.0
<i>Basommatophora</i>	100102	0.67	0.67		--	0.2	0.2
<i>Physa</i>	10010202026	1.67	1.67		SC	0.5	0.5
<i>Helisoma</i>	10010203030	0.00	0.33		SC	0.0	0.1
<i>Helisoma anceps</i>	10010203030058	0.33	0.00		--	0.1	0.0
<i>Ferrissia</i>	10010204035	1.67	2.67		SC	0.5	0.8
<i>Ferrissia rivularis</i>	10010204035066	0.67	0.00		--	0.2	0.0
<i>Ferrissia walkeri</i>	10010204035067	0.33	0.00		--	0.1	0.0
<i>Pisidium</i>	10020201002	0.33	2.00		CF	0.1	0.6
<i>Pisidium compressum</i>	10020201002007	1.00	0.00		--	0.3	0.0
<i>Pisidium walkeri</i>	10020201002017	0.67	0.00		--	0.2	0.0
<i>Sphaerium</i>	10020201003	0.33	0.33		CF	0.1	0.1