



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

Station Information

Station Number: S-973 DEP Drainage: Penobscot  
Waterbody: Eaton Brook - Station 973 HUC8: 01020005  
Town: Brewer HUC8 Name: Lower Penobscot  
Directions: DOWNSTREAM OF LAMBERT ROAD BY  
INTERSECTION WITH DAY ROAD Latitude: 44 47 44.77 N  
Longitude: 68 42 8.5 W  
Stream Order: 3

Sample Information

Log Number: 2032 Type of Sample: ROCK BAG Date Deployed: 7/12/2011  
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/11/2011

Classification Attainment

Statutory Class: B Final Determination: B Date: 9/5/2012  
Model Result with P>.6: B Reason for Determination: Model  
Date Last Calculated: 7/27/2012 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.42	Class A, B, or C	1.00
Class B	0.53	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	0.99	Class A	0.26
Class C or Non-Attainment	0.01	Class B or C or Non-Attainment	0.74

Model Variables

01 Total Mean Abundance	412.33	18 Relative Abundance Ephemeroptera	0.16
02 Generic Richness	67.00	19 EPT Generic Richness	20.00
03 Plecoptera Mean Abundance	2.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	12.67
04 Ephemeroptera Mean Abundance	68.00	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon-Wiener Generic Diversity	4.57	23 Relative Generic Richness- Plecoptera	0.01
06 Hilsenhoff Biotic Index	5.75	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	120.00
07 Relative Abundance - Chironomidae	0.44	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness Diptera	0.39	26 Sum of Abundances: <i>Acroneuria</i> ,	21.00
09 <i>Hydropsyche</i> Abundance	0.33	<i>Maccaffertium</i> , <i>Stenonema</i>	
11 <i>Cheumatopsyche</i> Abundance	5.33	28 EP Generic Richness/14	0.71
12 EPT Generic Richness/ Diptera	0.77	30 Presence of Class A Indicator Taxa/7	0.14
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family	2.00		
Functional Group)			
16 Tanypodinae Mean Abundance	18.33		
(Family Functional Group)			
17 Chironomini Abundance (Family	20.00		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Tanytarsus</i>	25.55
2	<i>Hydroptila</i>	7.44
3	<i>Oecetis</i>	6.23
4	<i>Stenacron</i>	5.01
5	<i>Maccaffertium</i>	4.61



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

<b>Station Number: S-973</b>	Town: Brewer	Date Deployed: 7/12/2011
<b>Log Number: 2032</b>	Waterbody: Eaton Brook - Station 973	Date Retrieved: 8/11/2011

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: ECOANALYSTS IDAHO

**Waterbody Information - Deployment**

Temperature:	25.3 deg C
Dissolved Oxygen:	5.9 mg/l
Specific Conductance:	86 uS/cm
Velocity:	17 cm/s
pH:	6.26
Wetted Width:	5.9 m
Bankfull Width:	5.9 m
Depth:	30 cm

**Waterbody Information - Retrieval**

Temperature:	20.4 deg C
Dissolved Oxygen:	6 mg/l
Specific Conductance:	88 uS/cm
Velocity:	10 cm/s
pH:	7.07
Wetted Width:	5.9 m
Bankfull Width:	5.9 m
Depth:	40 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

Landuse Name

Pasture  
Swamp Hardwood

Canopy Cover

Open

Terrain

Flat

Potential Stressor

Low Gradient

Location

Below Road Crossing

Substrate

Boulder	5 %
Gravel	10 %
Rubble/Cobble	80 %
Sand	5 %

**Landcover Summary - 2004 Data**

**Sample Comments**

LAND USE: PASTURE IS A FIELD. 7/12/11: MACROPHYTES, ALGAE, AND MANY FISH OBSERVED.



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

**Station Number: S-973**

Waterbody: Eaton Brook - Station 973

Town: Brewer

**Log Number: 2032**

Subsample Factor: X1

Replicates: 3

Calculated: 7/27/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	1.67	1.67		PR	0.4	0.4
<i>Turbellaria</i>	0301	4.67	4.67		--	1.1	1.1
<i>Dero</i>	08020202007		0.67		CG		0.2
<i>Dero digitata</i>	08020202007001	0.67			--	0.2	
<i>Stylaria</i>	08020202014		0.67		CG		0.2
<i>Stylaria lacustris</i>	08020202014002	0.67			--	0.2	
<i>Erpobdella</i>	08030203002	0.33	0.33		--	0.1	0.1
<i>Hyaella</i>	09010203006	4.67	4.67	8	CG	1.1	1.1
<i>Acronuria</i>	09020209042	1.00	2.00	0	PR	0.2	0.5
<i>Acronuria abnormis</i>	09020209042121	1.00		0	PR	0.2	
<i>Boyeria</i>	09020301004	1.67	1.67	2	PR	0.4	0.4
<i>Hagenius</i>	09020302008		1.33	1	PR		0.3
<i>Hagenius brevistylus</i>	09020302008015	1.33			PR	0.3	
Coenagrionidae	09020309	7.33	7.33		--	1.8	1.8
<i>Argia</i>	09020309048	8.67	8.67	7	PR	2.1	2.1
<i>Centroptilum</i>	09020401003	1.33	1.33	2	CG	0.3	0.3
<i>Proclon</i>	09020401010	2.00	2.00		CG	0.5	0.5
<i>Leucrocota</i>	09020402011	2.67	2.67	1	SC	0.6	0.6
<i>Stenacron</i>	09020402014	0.67	20.67	7	SC	0.2	5.0
<i>Stenacron interpunctatum</i>	09020402014045	20.00			--	4.9	
<i>Maccaffertium</i>	09020402015	19.00	19.00	4	SC	4.6	4.6
Leptophlebiidae	09020406	0.33	0.33		--	0.1	0.1
<i>Choroterpes</i>	09020406022	0.33	0.33	2	CG	0.1	0.1
<i>Tricorythodes</i>	09020411038	4.33	4.33	4	CG	1.1	1.1
<i>Caenis</i>	09020412040	17.33	17.33	7	CG	4.2	4.2
<i>Cernotina</i>	09020603006	18.00	18.00		PR	4.4	4.4
<i>Nyctiophylax</i>	09020603009	1.33	1.33	5	PR	0.3	0.3
<i>Cheumatopsyche</i>	09020604015	5.33	5.33	5	CF	1.3	1.3
<i>Hydropsyche</i>	09020604016	0.33	0.33	4	CF	0.1	0.1
<i>Hydroptila</i>	09020607026	30.67	30.67	6	P	7.4	7.4
<i>Oxyethira</i>	09020607028	2.67	2.67	3	P	0.6	0.6
<i>Micrasema</i>	09020609044	8.00	8.00	2	SH	1.9	1.9
<i>Apatania</i>	09020610061	0.33	0.33		SC	0.1	0.1
Leptoceridae	09020618	4.33			--	1.1	
<i>Ceraclea</i>	09020618072	6.67	7.66	3	CG	1.6	1.9
<i>Oecetis</i>	09020618078	22.33	25.67	8	PR	5.4	6.2
<i>Nigronia</i>	09020701003	0.67	0.67	0	PR	0.2	0.2
<i>Ablabesmyia</i>	09021011001		8.00	8	PR		1.9



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

**Station Number: S-973**

Waterbody: Eaton Brook - Station 973

Town: Brewer

**Log Number: 2032**

Subsample Factor: X1

Replicates: 3

Calculated: 7/27/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Ablabesmyia mallochii</i>	09021011001004	8.00			--	1.9	
<i>Labrundinia</i>	09021011008	0.33	0.33	7	PR	0.1	0.1
<i>Paramerina</i>	09021011013	0.33	0.33		--	0.1	0.1
<i>Thienemannimyia</i>	09021011020	9.67	9.67	3	PR	2.3	2.3
<i>Pagastia</i>	09021011025	0.33	0.33	1	--	0.1	0.1
<i>Cricotopus</i>	09021011037	1.33	1.33	7	SH	0.3	0.3
<i>Nanocladius</i>	09021011049	1.33	1.33	3	CG	0.3	0.3
<i>Orthocladius</i>	09021011050	0.33	0.33	6	CG	0.1	0.1
<i>Psectrocladius</i>	09021011056	9.67	9.67	8	CG	2.3	2.3
<i>Tvetenia</i>	09021011065		1.00	5	CG		0.2
<i>Tvetenia bavarica group</i>	09021011065111	1.00			--	0.2	
<i>Cladotanytarsus</i>	09021011068	1.33	1.33	7	CG	0.3	0.3
<i>Micropsectra</i>	09021011070	4.00	4.00	7	CG	1.0	1.0
<i>Paratanytarsus</i>	09021011071	7.67	7.67	6	--	1.9	1.9
<i>Rheotanytarsus</i>	09021011072		2.00	6	CF		0.5
<i>Rheotanytarsus exiguus</i>	09021011072127	0.67			CF	0.2	
<i>Rheotanytarsus pellucidus</i>	09021011072128	1.33			CF	0.3	
<i>Stempellina</i>	09021011073	1.33	1.33	2	CG	0.3	0.3
<i>Stempellinella</i>	09021011074	5.67	5.67	2	--	1.4	1.4
<i>Tanytarsus</i>	09021011076	105.33	105.33	6	CF	25.5	25.5
<i>Pseudochironomus</i>	09021011078	1.33	1.33	5	CG	0.3	0.3
<i>Dicrotendipes</i>	09021011085		8.67	8	CG		2.1
<i>Dicrotendipes modestus</i>	09021011085151	0.33			--	0.1	
<i>Dicrotendipes neomodestus</i>	09021011085152	8.33			--	2.0	
<i>Lauterborniella</i>	09021011092		1.33		CG		0.3
<i>Lauterborniella agrayloides</i>	09021011092001	1.33			--	0.3	
<i>Microtendipes</i>	09021011094		3.00	6	CF		0.7
<i>Microtendipes pedellus group</i>	09021011094166	0.67			--	0.2	
<i>Microtendipes rydalensis group</i>	09021011094168	2.33			--	0.6	
<i>Nilothauma</i>	09021011095	3.67	3.67	2	--	0.9	0.9
<i>Paratendipes</i>	09021011100	0.33	0.33	8	CG	0.1	0.1
<i>Phaenopsectra</i>	09021011101	1.00	1.00	7	SC	0.2	0.2
<i>Polypedilum</i>	09021011102		0.67	6	SH		0.2
<i>Polypedilum flavum</i>	09021011102182	0.33			--	0.1	
<i>Polypedilum scalaenum group</i>	09021011102189	0.33			--	0.1	
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Peltodytes</i>	09021101002	0.33	0.33		P	0.1	0.1
<i>Hydraena</i>	09021106051	0.33	0.33		--	0.1	0.1



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

**Station Number: S-973**

Waterbody: Eaton Brook - Station 973

Town: Brewer

**Log Number: 2032**

Subsample Factor: X1

Replicates: 3

Calculated: 7/27/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Psephenus</i>	09021108058		3.33	4	SC		0.8
<i>Psephenus herricki</i>	09021108058028	3.33			--	0.8	
Elmidae	09021113	0.33			--	0.1	
<i>Dubiraphia</i>	09021113064	16.00	16.24	6	--	3.9	3.9
<i>Macronychus</i>	09021113065		0.68	4	--		0.2
<i>Macronychus glabratus</i>	09021113065040	0.67			--	0.2	
<i>Promoresia</i>	09021113069		1.01		--		0.2
<i>Promoresia elegans</i>	09021113069051	0.67			--	0.2	
<i>Promoresia tardella</i>	09021113069052	0.33			--	0.1	
<i>Stenelmis</i>	09021113070	4.67	4.74	5	SC	1.1	1.1
<i>Lebertia</i>	09030105001	0.67	0.67		--	0.2	0.2
<i>Limnesia</i>	09030112001	1.33	1.33		--	0.3	0.3
Hydrobiidae	10010104	1.33	1.33		--	0.3	0.3