

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

**Station Information**

<b>Station Number:</b> S375	DEP Drainage: St. John
Waterbody: Rocky Brook	HUC Code: 01010005
Town: MARS HILL	HUC Name: Meduxnekeag
Directions: Boyton Road crossing	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 3

**Sample Information**

<b>Log Number:</b> 1374	Type of Sample: Riffle Bags	Date Deployed: 19-JUL-04
Subsample Factor: X1	Replicates: 3	Date Retrieved: 16-AUG-04

**Classification Attainment**

Statutory Class: B	<b>Final Determination:</b> A	
Model Result with P > .6: A	Reason for Determination: Model	
Date Last Calculated:		

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.78	Class A, B, or C	1.00
Class B	0.21	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.99
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.01

**Model Variables**

01 Total Abundance of Individuals	290.00	18 Relative Abundance - Ephemeroptera	0.36
02 Generic Richness	40.00	19 EPT Generic Richness	18.00
03 Plecoptera Abundance	6.33	21 Sum of Abundances: <i>Dicrotendipes</i> ,	6.00
04 Ephemeroptera Abundance	105.00	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	3.18	23 Relative Generic Richness- Plecoptera	0.08
06 Hilsenhoff Biotic Index	3.37	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	5.47
07 Relative Abundance - Chironomidae	0.07	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.35	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	2.54
09 <i>Hydropsyche</i> Abundance	114.19	28 EP Generic Richness/14	0.79
11 <i>Cheumatopsyche</i> Abundance	5.14	30 Presence of Class A Indicator Taxa/7	0.29
12 EPT Generic Richness/ Diptera Generic Richness	1.29		

**Five Most Dominant Taxa**

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.00	1	Hydropsyche	39.38
15 Perlidae Abundance (Family Functional Group)	5.67	2	Ephemerella	19.31
16 Tanypodinae Abundance (Family Functional Group)	0.67	3	Baetis	11.03
17 Chironomini Abundance (Family Functional Group)	8.33	4	Dubiraphia	3.45
		5	Glossosoma	2.53

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

---

Station Number S375      Town:      MARS HILL      Date Deployed: 19-JUL-04  
Log Number:      1374      Waterbody: Rocky Brook      Date Retrieved: 16-AUG-04

---

**Sample Collection and Processing Information**

---

Sampling Organization:  
Taxonomist:      Lotic

---

**Waterbody Information**

---

Water Temperature: 19.8 °C	Specific Conductance 416.0 uS/cm	Channel Width: 8.4 m
Velocity: 50 cm/s	Dissolved Oxygen: 8.3 ppm	Channel Depth: 25.0 cm

---

**Summary of Habitat Characteristics**

---

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Cultivated	Partly Open		Not Designated

---

**Substrate**

---

Boulder	Rubble	Gravel	Sand	Silt
20%	30%	20%	10%	20%

---

**Comments about the Station or Sample**

---

8/16/04 Data:  
Flow: 98.4cm/s; Depth: 24cm; Temp: 18.8C; SPC: 285uS/cm; DO: mg/L; pH:7.53

---

**Comments about the Final Determination**

---

**Maine Department of Environmental Protection  
Biological Monitoring Unit**

Station Number: S375    Waterbody: Rocky Brook

Town: MARS HILL

Log Number: 1374    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>Orconectes</i>	09010301008			0.33	0.33
<i>Nemouridae</i>	09020201	0.33	0.33		--	0.1	0.1
<i>Leuctra</i>	09020204020	0.33	0.33	0	SH	0.1	0.1
<i>Agnetina</i>	09020209050	0.00	5.67	2	PR	0.0	2.0
<i>Agnetina capitata</i>	09020209050152	1.00	0.00	2	PR	0.3	0.0
<i>Agnetina flavescens</i>	09020209050153	4.67	0.00	2	PR	1.6	0.0
<i>Baetis</i>	09020401001	20.00	32.00	4	CG	6.9	11.0
<i>Baetis brunneicolor</i>	09020401001003	3.67	0.00		--	1.3	0.0
<i>Baetis flavistriga</i>	09020401001004	8.00	0.00		--	2.8	0.0
<i>Baetis intercalaris</i>	09020401001008	0.33	0.00		--	0.1	0.0
<i>Acentrella</i>	09020401008	0.00	7.00	3	CG	0.0	2.4
<i>Acentrella ampla</i>	09020401008001	7.00	0.00		--	2.4	0.0
<i>Heptageniidae</i>	09020402	0.67	0.00		--	0.2	0.0
<i>Heptagenia</i>	09020402010	0.33	0.36	2	SC	0.1	0.1
<i>Leucrocuta</i>	09020402011	5.00	5.43	1	SC	1.7	1.9
<i>Stenonema</i>	09020402015	2.33	2.54	4	SC	0.8	0.9
<i>Isonychia</i>	09020404018	0.33	0.33	2	CF	0.1	0.1
<i>Paraleptophlebia</i>	09020406026	1.33	1.33	1	CG	0.5	0.5
<i>Ephemerella</i>	09020410035	56.00	56.00	1	CG	19.3	19.3
<i>Philopotamidae</i>	09020601	0.33	0.33		--	0.1	0.1
<i>Chimarra</i>	09020601003	0.33	0.33	2	CF	0.1	0.1
<i>Hydropsychidae</i>	09020604	11.00	0.00		--	3.8	0.0
<i>Cheumatopsyche</i>	09020604015	4.67	5.14	5	CF	1.6	1.8
<i>Hydropsyche</i>	09020604016	103.67	114.19	4	CF	35.7	39.4
<i>Rhyacophila</i>	09020605019	5.00	5.00	2	PR	1.7	1.7
<i>Glossosoma</i>	09020606020	7.33	7.33	0	SC	2.5	2.5
<i>Oecetis</i>	09020618078	0.67	0.67	8	PR	0.2	0.2
<i>Diptera</i>	090210	0.67	0.67		--	0.2	0.2
<i>Dicranota</i>	09021001005	0.33	0.33	3	PR	0.1	0.1
<i>Erioptera</i>	09021001006	0.33	0.33	7	CG	0.1	0.1
<i>Procladius</i>	09021011015	0.33	0.33	9	PR	0.1	0.1
<i>Thienemannimyia</i>	09021011020	0.33	0.33	3	PR	0.1	0.1
<i>Corynoneura</i>	09021011036	0.33	0.33	7	CG	0.1	0.1
<i>Eukiefferiella</i>	09021011041	0.67	0.67	8	CG	0.2	0.2
<i>Parametriocnemus</i>	09021011053	0.67	0.67	5	CG	0.2	0.2
<i>Rheocricotopus</i>	09021011057	0.33	0.33	6	CG	0.1	0.1
<i>Tvetenia</i>	09021011065	4.00	4.00	5	CG	1.4	1.4

**Maine Department of Environmental Protection  
Biological Monitoring Unit**

**Station Number:** S375    **Waterbody:** Rocky Brook

**Town:** MARS HILL

**Log Number:** 1374    **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>Micropsectra</i>	09021011070			6.00	6.00
<i>Tanytarsus</i>	09021011076	0.33	0.33	6	CF	0.1	0.1
<i>Microtendipes</i>	09021011094	7.00	7.00	6	CF	2.4	2.4
<i>Polypedilum</i>	09021011102	1.33	1.33	6	SH	0.5	0.5
<i>Simulium</i>	09021012047	2.67	2.67	4	CF	0.9	0.9
<i>Dytiscidae</i>	09021103	0.33	0.33		--	0.1	0.1
<i>Psephenus</i>	09021108058	0.33	0.33	4	SC	0.1	0.1
<i>Dubiraphia</i>	09021113064	10.00	10.00	6	CG	3.4	3.4
<i>Optioservus</i>	09021113067	1.33	1.33	3	SC	0.5	0.5
<i>Promoresia</i>	09021113069	6.67	6.67		--	2.3	2.3
<i>Physidae</i>	10010202	0.33	0.33		SC	0.1	0.1
<i>Planorbella</i>	10010203032	1.00	1.00		SC	0.3	0.3