



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

Station Information

Station Number: S-870
Waterbody: Unnamed Stream (big Moose Twp) - Station 870
Town: Big Moose Twp
Directions: 34 M ABOVE ROAD CROSSING

DEP Drainage: Kennebec
HUC8: 01030001
HUC8 Name: Upper Kennebec
Latitude: 45 31 52.17 N
Longitude: 69 43 56.92 W
Stream Order: 1

Sample Information

Log Number: 1731
Subsample Factor: X1

Type of Sample: ROCK BAG
Replicates: 3

Date Deployed: 7/17/2008
Date Retrieved: 8/15/2008

Classification Attainment

Statutory Class: A
Model Result with P>.6: A
Date Last Calculated: 3/30/2009

Final Determination: A
Reason for Determination: Model
Comments:

Date: 3/31/2009

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.64	Class C	0.02	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	1.00	Class A	0.81
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.19

Model Variables

01 Total Mean Abundance	316.67	18 Relative Abundance Ephemeroptera	0.34
02 Generic Richness	64.00	19 EPT Generic Richness	14.00
03 Plecoptera Mean Abundance	1.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	27.08
04 Ephemeroptera Mean Abundance	106.33	23 Relative Generic Richness- Plecoptera	0.03
05 Shannon-Wiener Generic Diversity	4.38	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	5.60
06 Hilsenhoff Biotic Index	4.82	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.33	28 EP Generic Richness/14	0.50
08 Relative Generic Richness Diptera	0.48	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	1.33		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera	0.45		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.07		
15 Perlidae Mean Abundance	0.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	33.22		
(Family Functional Group)			
17 Chironomini Abundance (Family	4.80		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	Leptophlebiidae	24.53
2	<i>Micropsectra</i>	8.34
3	<i>Bezzia/palpomyia</i>	7.68
4	<i>Paraleptophlebia</i>	6.84
5	<i>Stylodrilus</i>	6.21



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Date Retrieved: 8/15/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 18.4 deg C
Dissolved Oxygen: 6.8 mg/l
Specific Conductance: 32 uS/cm
Velocity: 20 cm/s
pH: 6.32
Wetted Width: 1.5 m
Bankfull Width: 3.7 m
Depth: 20 cm

Waterbody Information - Retrieval

Temperature: 13.7 deg C
Dissolved Oxygen: 8.9 mg/l
Specific Conductance: 32 uS/cm
Velocity: 29 cm/s
pH: 6.67
Wetted Width: 2.8 m
Bankfull Width: 3.7 m
Depth: 40 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Canopy Cover

Terrain

Swamp Hardwood

Canopy Partly Open

Rolling Terrain

Stressor

Location

Substrate

Above Road Crossing

Gravel 65 %
Sand 20 %
Silt 15 %

Landcover Summary - 2004 Data

Sample Comments

BEAVER DAM UPSTREAM; HEAVY BEAVER ACTIVITY (DAM TAKEN OUT AT ROAD CROSSING)



**Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report**

Station Number: S-870 Waterbody: Unnamed Stream (big Moose Twp) - Station Town: Big Moose Twp
Log Number: 1731 Subsample Factor: X1 Replicates: 3 Calculated: 3/30/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	0.33	0.33		PR	0.1	0.1
Nematoda	05	0.33	0.33		--	0.1	0.1
<i>Lumbriculus</i>	08020101002		0.33		CG		0.1
<i>Lumbriculus variegatus</i>	08020101002001	0.33			--	0.1	
Enchytraeidae	08020201	0.33	0.33		--	0.1	0.1
<i>Stylodrilus</i>	08020203011		19.67		--		6.2
<i>Stylodrilus heringianus</i>	08020203011001	19.67			--	6.2	
Lumbricidae	08020205	0.67	0.67		--	0.2	0.2
<i>Glossiphonia</i>	08030101004		0.33		--		0.1
<i>Glossiphonia complanata</i>	08030101004001	0.33			--	0.1	
<i>Helobdella</i>	08030101005		0.67		--		0.2
<i>Helobdella stagnalis</i>	08030101005004	0.67			--	0.2	
<i>Placobdella</i>	08030101006		0.33		--		0.1
<i>Placobdella papillifera</i>	08030101006003	0.33			--	0.1	
Isotomidae	09020102	0.33	0.33		--	0.1	0.1
<i>Leuctra</i>	09020204020	0.33	0.33	0	SH	0.1	0.1
Perlodidae	09020207	0.67	0.67		--	0.2	0.2
<i>Lanthus</i>	09020302014		2.33		PR		0.7
<i>Lanthus parvulus</i>	09020302014030	2.33			--	0.7	
<i>Cordulegaster</i>	09020303019	0.33	0.67	3	PR	0.1	0.2
<i>Cordulegaster maculata</i>	09020303019042	0.33			--	0.1	
Baetidae	09020401	0.33	0.33		--	0.1	0.1
<i>Acerpenna</i>	09020401007	0.33	4.33	5	CG	0.1	1.4
<i>Acerpenna macdunnoughi</i>	09020401007001	4.00			--	1.3	
Leptophlebiidae	09020406	77.67	77.67		--	24.5	24.5
<i>Paraleptophlebia</i>	09020406026	21.67	21.67	1	CG	6.8	6.8
<i>Eurylophella</i>	09020410036	2.33	2.33	3	CG	0.7	0.7
<i>Polycentropus</i>	09020603010	4.00	4.00	6	PR	1.3	1.3
<i>Hydropsyche</i>	09020604016	1.00	1.33	4	CF	0.3	0.4
<i>Hydropsyche morosa</i>	09020604016030	0.33			--	0.1	
<i>Rhyacophila</i>	09020605019	0.33	0.33	2	PR	0.1	0.1
Phryganeidae	09020608	2.00	2.00		--	0.6	0.6
<i>Oligostomis</i>	09020608039	6.00	6.00	2	PR	1.9	1.9
Limnephilidae	09020610	2.33			--	0.7	
<i>Pycnopsyche</i>	09020610049	2.67	4.53	4	SH	0.8	1.4
<i>Psychoglypha</i>	09020610060		1.13	0	SH		0.4
<i>Psychoglypha subborealis</i>	09020610060120	0.67			--	0.2	
<i>Sialis</i>	09020702004	2.33	2.33	4	PR	0.7	0.7



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Tipulidae	09021001	0.33			--	0.1	
<i>Tipula</i>	09021001002	1.33	1.50	4	SH	0.4	0.5
<i>Dicranota</i>	09021001005	0.67	0.75	3	PR	0.2	0.2
<i>Hexatoma</i>	09021001008	0.33	0.38	2	PR	0.1	0.1
<i>Gonomyia</i>	09021001019	0.33	0.38		--	0.1	0.1
<i>Culicoides</i>	09021010037	0.33	0.33	10	PR	0.1	0.1
<i>Probezzia</i>	09021010041	0.33	0.33	6	PR	0.1	0.1
<i>Bezzia/palpomyia</i>	09021010043	24.33	24.33	6	PR	7.7	7.7
Chironomidae	09021011	17.67			--	5.6	
<i>Larsia</i>	09021011009	0.33	0.40	6	PR	0.1	0.1
<i>Meropelopia</i>	09021011010	1.67	2.00		--	0.5	0.6
<i>Natarsia</i>	09021011011	1.33	1.60	8	PR	0.4	0.5
<i>Paramerina</i>	09021011013	9.33	11.21		--	2.9	3.5
<i>Procladius</i>	09021011015	0.33	0.40	9	PR	0.1	0.1
<i>Trissopelopia</i>	09021011021		1.60		PR		0.5
<i>Trissopelopia ogemawi</i>	09021011021042	1.33			--	0.4	
<i>Zavrelimyia</i>	09021011022		16.01	8	PR		5.1
<i>Zavrelimyia thryptica-grp.</i>	09021011022045	13.33			PR	4.2	
<i>Pagastia</i>	09021011025		0.40	1	--		0.1
<i>Pagastia orthogonia</i>	09021011025001	0.33			--	0.1	
<i>Brillia</i>	09021011033	3.33	4.00	5	SH	1.1	1.3
<i>Corynoneura</i>	09021011036	0.67	0.80	7	CG	0.2	0.3
<i>Heterotrissocladius</i>	09021011044		11.21	0	CG		3.5
<i>Heterotrissocladius marcidus</i>	09021011044083	9.33			--	2.9	
<i>Limnophyes</i>	09021011047	0.33	0.40	8	CG	0.1	0.1
<i>Parametriocnemus</i>	09021011053	5.33	12.01	5	CG	1.7	3.8
<i>Parametriocnemus sp. f epler</i>	09021011053101	4.67			--	1.5	
<i>Rheocricotopus</i>	09021011057	0.67	0.80	6	CG	0.2	0.3
<i>Rheocricotopus effusus</i>	09021011057113				--		
<i>Thienemanniella</i>	09021011062		1.20	6	CG		0.4
<i>Thienemanniella xena</i>	09021011062110	1.00			--	0.3	
<i>Micropsectra</i>	09021011070	22.00	26.42	7	CG	6.9	8.3
<i>Paratanytarsus</i>	09021011071	0.67	0.80	6	--	0.2	0.3
<i>Rheotanytarsus</i>	09021011072	0.67	0.80	6	CF	0.2	0.3
<i>Stempellinella</i>	09021011074		2.40	2	--		0.8
<i>Stempellinella leptocelloides</i>	09021011074001	1.33			--	0.4	
<i>Stempellinella sp. a epler</i>	09021011074002	0.67			--	0.2	
<i>Tanytarsus</i>	09021011076	4.67	5.60	6	CF	1.5	1.8



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<i>Polypedilum</i>	09021011102	0.33	4.80	6	SH	0.1	1.5
<i>Polypedilum aviceps</i>	09021011102181	0.67			--	0.2	
<i>Polypedilum fallax-grp.</i>	09021011102183	0.67			--	0.2	
<i>Polypedilum illinoense-grp.</i>	09021011102185	2.00			--	0.6	
<i>Polypedilum tritum</i>	09021011102191	0.33			--	0.1	
<i>Macropelopia</i>	09021011111		0.80		P		0.3
<i>Macropelopia decedens</i>	09021011111002	0.67			--	0.2	
<i>Simulium</i>	09021012047		0.67	4	CF		0.2
<i>Simulium tuberosum</i>	09021012047067	0.67			--	0.2	
<i>Chrysops</i>	09021014052	10.00	10.00	6	CG	3.2	3.2
<i>Neoporus</i>	09021103033	4.33	4.33		--	1.4	1.4
<i>Oulimnius</i>	09021113068		0.67		--		0.2
<i>Oulimnius latiusculus</i>	09021113068049	0.67			--	0.2	
Acariformes	090301	0.33	0.33		--	0.1	0.1
<i>Physa</i>	10010202026	0.33	0.33		SC	0.1	0.1
Sphaeriidae	10020201	3.33	3.33		CF	1.1	1.1
<i>Pisidium</i>	10020201002	4.67	8.00		CF	1.5	2.5
<i>Pisidium casertanum</i>	10020201002006	0.33			CF	0.1	
<i>Pisidium walkeri</i>	10020201002017	3.00			CF	0.9	