



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

**Station Information**

<b>Station Number:</b> S-152	DEP Drainage: Penobscot
Waterbody: Piscataquis River - Station 152	HUC8: 01020004
Town: Dover-foxcroft	HUC8 Name: Piscataquis
Directions: 1 KM BELOW DOVER - FOXCROFT POTW	Latitude: 45 11 9.97 N
	Longitude: 69 10 0.94 W
	Stream Order: 5

**Sample Information**

<b>Log Number:</b> 1567	Type of Sample: ROCK BASKET	Date Deployed: 7/18/2006
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/15/2006

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> A	Date: 3/30/2009
Model Result with P>.6: B	<b>Reason for Determination: Best Professional Judgement</b>	
Date Last Calculated: 3/18/2009	Comments: Indeterminant Class A (.59) raised to Class A based on sensitive organisms present.	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.34	Class C	0.03
Class B	0.62	NA	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.59
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.41

**Model Variables**

01 Total Mean Abundance	1262.67	18 Relative Abundance Ephemeroptera	0.36
02 Generic Richness	35.00	19 EPT Generic Richness	21.00
03 Plecoptera Mean Abundance	12.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	453.33	23 Relative Generic Richness- Plecoptera	0.09
05 Shannon-Wiener Generic Diversity	3.31	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	24.16
06 Hilsenhoff Biotic Index	3.59	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	129.62
07 Relative Abundance - Chironomidae	0.08	28 EP Generic Richness/14	0.93
08 Relative Generic Richness Diptera	0.29	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	474.60		
11 <i>Cheumatopsyche</i> Abundance	21.39		
12 EPT Generic Richness/ Diptera Generic Richness	2.10		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	10.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.39		
17 Chironomini Abundance (Family Functional Group)	30.52		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	37.59
2	<i>Isonychia</i>	11.93
3	<i>Simulium</i>	10.45
4	<i>Maccaffertium</i>	9.53
5	<i>Plauditus</i>	4.53



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**Log Number: 1567**

Town: Dover-foxcroft  
Waterbody: Piscataquis River - Station 152

Date Deployed: 7/18/2006  
Date Retrieved: 8/15/2006

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT  
Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 27.3 deg C  
Dissolved Oxygen: 8.1 mg/l  
Specific Conductance: 58 uS/cm  
Velocity: 43 cm/s  
pH:  
Wetted Width: 46 m  
Bankfull Width: 46 m  
Depth: 40 cm

**Waterbody Information - Retrieval**

Temperature: 20 deg C  
Dissolved Oxygen: 9.42 mg/l  
Specific Conductance: 61 uS/cm  
Velocity: 24 cm/s  
pH: 7.33  
Wetted Width: 46 m  
Bankfull Width:  
Depth: 37 cm

**Water Chemistry - Retrieval**

Ammonia As Nitrogen	0.01 mg/l	Soluble Reactive Phosphorus	2 ug/l
Nitrate+nitrite As N	0.03 mg/l	Total Phosphorus	0.013 mg/l
Total Kjeldahl Nitrogen	0.3 mg/l	Total Suspended Solids	1.4 mg/l
Dissolved Organic Carbon	5.7 mg/l	Total Dissolved Solids	50 mg/l

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Canopy Open	Rolling Terrain
<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>
	Below POTW	Boulder 15 %
		Gravel 20 %
		Rubble/Cobble 60 %
		Sand 5 %

**Landcover Summary - 2004 Data**

Total Area (ac)	229936	High Int. Dev. %	0.2	Water %	2.2	Non-vegetated %	0.0
Total Land (ac)	225055	Med Int. Dev. %	0.2	Wetland %	3.4	Tilled Agriculture %	1.8
		Low Int. Dev. %	3.6	Upland Woody %	89.3	Human Altered %	7.3
		Development %	3.9	Natural %	92.7	Impervious %	1.3

**Sample Comments**



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**Station Number: S-152**      Waterbody: Piscataquis River - Station 152      Town: Dover-foxcroft  
**Log Number: 1567**      Subsample Factor: X4      Replicates: 3      Calculated: 3/18/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Nemoura</i>	09020201002	1.33	1.33	1	SH	0.1	0.1
Perlidae	09020209	1.33	1.33		--	0.1	0.1
<i>Acroneuria</i>	09020209042	2.67	9.33	0	PR	0.2	0.7
<i>Acroneuria abnormis</i>	09020209042121	6.67		0	PR	0.5	
Baetidae	09020401	6.67			--	0.5	
<i>Baetis</i>	09020401001		15.73	4	CG		1.2
<i>Baetis flavistriga</i>	09020401001004	4.00			--	0.3	
<i>Baetis intercalaris</i>	09020401001008	10.67			--	0.8	
<i>Heterocloeon</i>	09020401005		24.31	2	SC		1.9
<i>Heterocloeon curiosum</i>	09020401005020	22.67			--	1.8	
<i>Acerpenna</i>	09020401007	1.33	1.43	5	CG	0.1	0.1
<i>Plauditus</i>	09020401012	53.33	57.20		CG	4.2	4.5
Heptageniidae	09020402	4.00			--	0.3	
<i>Epeorus</i>	09020402009	8.00	8.20	0	CG	0.6	0.6
<i>Leucrocuta</i>	09020402011	33.33	34.17	1	SC	2.6	2.7
<i>Maccaffertium</i>	09020402015	81.33	120.29	4	SC	6.4	9.5
<i>Maccaffertium luteum</i>	09020402015049	8.00			--	0.6	
<i>Maccaffertium mediopunctatum</i>	09020402015050	26.67			--	2.1	
<i>Maccaffertium modestum</i>	09020402015051	1.33			--	0.1	
<i>Isonychia</i>	09020404018	150.67	150.67	2	CF	11.9	11.9
<i>Serratella</i>	09020410037		38.67	2	CG		3.1
<i>Serratella (Teloganopsis) deficiens</i>	09020410037121	38.67			--	3.1	
<i>Tricorythodes</i>	09020411038	2.67	2.67	4	CG	0.2	0.2
<i>Chimarra</i>	09020601003	42.67	42.67	2	CF	3.4	3.4
<i>Cernotina</i>	09020603006	1.33	1.33		PR	0.1	0.1
<i>Neureclipsis</i>	09020603008	1.33	1.33	7	CF	0.1	0.1
Hydropsychidae	09020604	1.33			--	0.1	
<i>Cheumatopsyche</i>	09020604015	21.33	21.39	5	CF	1.7	1.7
<i>Hydropsyche</i>	09020604016	29.33	474.60	4	CF	2.3	37.6
<i>Hydropsyche morosa</i>	09020604016030	56.00			--	4.4	
<i>Hydropsyche sparna</i>	09020604016032	12.00			--	1.0	
<i>Hydropsyche phalerata</i>	09020604016047	1.33			--	0.1	
<i>Hydropsyche scalaris-group</i>	09020604016048	309.33			--	24.5	
<i>Hydropsyche simulans</i>	09020604016049	65.33			--	5.2	
<i>Macrostemum</i>	09020604018		5.35	3	CF		0.4
<i>Macrostemum zebratum</i>	09020604018054	5.33			--	0.4	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.1	0.1
<i>Helicopsyche</i>	09020616070		1.33	3	SC		0.1



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		Actual	Adjusted			Actual	Adjusted
<i>Helicopsyche borealis</i>	09020616070137	1.33			--	0.1	
<i>Corydalus</i>	09020701002		5.33	6	PR		0.4
<i>Corydalus cornutus</i>	09020701002002	5.33			--	0.4	
Chironomidae	09021011	4.00			--	0.3	
<i>Nilotanytus</i>	09021011012		1.39	6	PR		0.1
<i>Nilotanytus fimbriatus</i>	09021011012027	1.33			--	0.1	
<i>Cricotopus</i>	09021011037	1.33	2.77	7	SH	0.1	0.2
<i>Cricotopus luciae</i>	09021011037073	1.33			--	0.1	
<i>Nanocladius</i>	09021011049		2.77	3	CG		0.2
<i>Nanocladius branchicolus</i>	09021011049091	2.67			--	0.2	
<i>Orthocladius</i>	09021011050	2.67	4.16	6	CG	0.2	0.3
<i>Orthocladius carlatus</i>	09021011050093	1.33			--	0.1	
<i>Rheocricotopus</i>	09021011057		1.39	6	CG		0.1
<i>Rheocricotopus robacki</i>	09021011057105	1.33			--	0.1	
<i>Tvetenia</i>	09021011065		31.91	5	CG		2.5
<i>Tvetenia vitracies</i>	09021011065113	30.67			--	2.4	
<i>Rheotanytarsus</i>	09021011072	26.67	27.75	6	CF	2.1	2.2
<i>Polypedilum</i>	09021011102		27.75	6	SH		2.2
<i>Polypedilum flavum</i>	09021011102182	25.33			--	2.0	
<i>Polypedilum ontario</i>	09021011102194	1.33			--	0.1	
<i>Stenochironomus</i>	09021011105	2.67	2.77	5	CG	0.2	0.2
<i>Simulium</i>	09021012047	74.67	132.00	4	CF	5.9	10.5
<i>Simulium fibrinflatum</i>	09021012047059	21.33			--	1.7	
<i>Simulium jenningsi</i>	09021012047060	36.00			--	2.9	
<i>Psephenus</i>	09021108058		1.33	4	SC		0.1
<i>Psephenus herricki</i>	09021108058028	1.33			--	0.1	
<i>Promoresia</i>	09021113069		1.33		--		0.1
<i>Promoresia tardella</i>	09021113069052	1.33			--	0.1	
<i>Stenelmis</i>	09021113070		5.33	5	SC		0.4
<i>Stenelmis concinna</i>	09021113070054	5.33			--	0.4	