



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

Station Information

Station Number:	S-768	DEP Drainage:	Kennebec
Waterbody:	Carrying Place Stream - Station 768	HUC8:	01030003
Town:	Carrying Place Twp	HUC8 Name:	Lower Kennebec
Directions:	RT 16 TO RIDGE RD, TAKE CARRYING POND RD TO MILE-2 BRIDGE	Latitude:	45 10 53.36 N
		Longitude:	70 0 59.33 W
		Stream Order:	2

Sample Information

Log Number:	1668	Type of Sample:	ROCK BAG	Date Deployed:	7/24/2007
Subsample Factor:	X1	Replicates:	3	Date Retrieved:	8/21/2007

Classification Attainment

Statutory Class:	A	Final Determination:	A	Date:	5/2/2008
Model Result with P>.6:	A	Reason for Determination:	Model		
Date Last Calculated:	3/18/2009	Comments:			

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.88	Class C	0.00	Class A, B, or C	1.00
Class B	0.12	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	1.00
Class C or Non-Attainment			0.00	Class B or C or Non-Attainment	0.00

Model Variables

01 Total Mean Abundance	97.00	18 Relative Abundance Ephemeroptera	0.28
02 Generic Richness	47.00	19 EPT Generic Richness	22.00
03 Plecoptera Mean Abundance	9.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.69
04 Ephemeroptera Mean Abundance	27.00	23 Relative Generic Richness- Plecoptera	0.13
05 Shannon-Wiener Generic Diversity	4.49	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	5.49
06 Hilsenhoff Biotic Index	4.17	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	8.72
07 Relative Abundance - Chironomidae	0.23	28 EP Generic Richness/14	1.07
08 Relative Generic Richness Diptera	0.38	30 Presence of Class A Indicator Taxa/7	0.71
09 <i>Hydropsyche</i> Abundance	5.67		
11 <i>Cheumatopsyche</i> Abundance	0.33		
12 EPT Generic Richness/ Diptera Generic Richness	1.22		
13 Relative Abundance - Oligochaeta	0.05		
15 Perlidae Mean Abundance (Family Functional Group)	9.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	2.41		
17 Chironomini Abundance (Family Functional Group)	1.03		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Neureclipsis</i>	14.78
2	<i>Ephemerella</i>	11.68
3	<i>Maccaffertium</i>	8.25
4	<i>Aqnetina</i>	7.79
5	<i>Rheotanytarsus</i>	7.09



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

Station Number: S-768

Town: Carrying Place Twp

Date Deployed: 7/24/2007

Log Number: 1668

Waterbody: Carrying Place Stream - Station 768

Date Retrieved: 8/21/2007

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 17.7 deg C
Dissolved Oxygen: 8.9 mg/l
Specific Conductance: 28 uS/cm
Velocity: 21 cm/s
pH: 6.85
Wetted Width: 11.5 m
Bankfull Width: 16 m
Depth: 40 cm

Waterbody Information - Retrieval

Temperature: 12.6 deg C
Dissolved Oxygen: 9.1 mg/l
Specific Conductance: 36 uS/cm
Velocity: 24 cm/s
pH: 6.97
Wetted Width: 11.5 m
Bankfull Width: 16 m
Depth: 30 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Canopy Cover

Terrain

Swamp Conifer

Canopy Partly Open

Rolling Terrain

Swamp Hardwood

Stressor

Location

Substrate

Logging Stressor

Below Forestry NPS

Bedrock 50 %
Boulder 30 %
Gravel 5 %
Rubble/Cobble 10 %
Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	6557	High Int. Dev. %	0.0	Water %	5.2	Non-vegetated %	0.3
Total Land (ac)	6236	Med Int. Dev. %	0.0	Wetland %	2.6	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.9	Upland Woody %	96.3	Human Altered %	0.9
		Development %	0.9	Natural %	99.1	Impervious %	0.1

Sample Comments



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 1668

Subsample Factor: X1

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>Nais</i>	08020202009		4.33		CG		4.5
<i>Nais behningi</i>	08020202009003	4.33			--	4.5	
<i>Stylodrilus</i>	08020203011		0.33		--		0.3
<i>Stylodrilus heringianus</i>	08020203011001	0.33			--	0.3	
<i>Pteronarcys</i>	09020205023		0.33	0	SH		0.3
<i>Pteronarcys biloba</i>	09020205023061	0.33			--	0.3	
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.3	0.3
Perlidae	09020209	0.67			--	0.7	
<i>Acroneuria</i>	09020209042		0.72	0	PR		0.7
<i>Acroneuria abnormis</i>	09020209042121	0.33		0	PR	0.3	
<i>Acroneuria carolinensis</i>	09020209042123	0.33			--	0.3	
<i>Attaneuria</i>	09020209043		0.36	1	--		0.4
<i>Attaneuria ruralis</i>	09020209043128	0.33			--	0.3	
<i>Paragnetina</i>	09020209049		0.36	1	PR		0.4
<i>Paragnetina immarginata</i>	09020209049149	0.33			--	0.3	
<i>Agnatina</i>	09020209050		7.56	2	PR		7.8
<i>Agnatina capitata</i>	09020209050152	7.00		2	PR	7.2	
<i>Boyeria</i>	09020301004	1.67	3.33	2	PR	1.7	3.4
<i>Boyeria grafiana</i>	09020301004011	1.67			--	1.7	
Calopterygidae	09020307	0.67	0.67		--	0.7	0.7
<i>Calopteryx</i>	09020307043		3.33	5	PR		3.4
<i>Calopteryx aequabilis</i>	09020307043085	3.33			--	3.4	
<i>Baetis</i>	09020401001		1.00	4	CG		1.0
<i>Baetis flavistriga</i>	09020401001004	0.67			--	0.7	
<i>Baetis pluto</i>	09020401001009	0.33			--	0.3	
<i>Acerpenna</i>	09020401007		0.33	5	CG		0.3
<i>Acerpenna macdunnoughi</i>	09020401007001	0.33			--	0.3	
<i>Leucrocuta</i>	09020402011	1.00	1.00	1	SC	1.0	1.0
<i>Stenacron</i>	09020402014		0.33	7	SC		0.3
<i>Stenacron interpunctatum</i>	09020402014045	0.33			--	0.3	
<i>Maccaffertium</i>	09020402015	6.33	8.00	4	SC	6.5	8.2
<i>Maccaffertium luteum</i>	09020402015049	1.67			--	1.7	
<i>Habrophlebia</i>	09020406023	0.33	0.33		--	0.3	0.3
<i>Ephemerella</i>	09020410035	11.33	11.33	1	CG	11.7	11.7
<i>Eurylophella</i>	09020410036	3.67	3.67	3	CG	3.8	3.8
<i>Caenis</i>	09020412040		1.00	7	CG		1.0
<i>Caenis macafferti</i>	09020412040132	1.00			--	1.0	
<i>Chimarra</i>	09020601003	0.33	0.33	2	CF	0.3	0.3



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 1668

Subsample Factor: X1

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>Neureclipsis</i>	09020603008	14.33	14.33	7	CF	14.8	14.8
<i>Cheumatopsyche</i>	09020604015	0.33	0.33	5	CF	0.3	0.3
<i>Hydropsyche</i>	09020604016	1.67	5.67	4	CF	1.7	5.8
<i>Hydropsyche sparna</i>	09020604016032	4.00			--	4.1	
<i>Rhyacophila</i>	09020605019		1.00	2	PR		1.0
<i>Rhyacophila fuscula</i>	09020605019060	1.00			PR	1.0	
<i>Glossosoma</i>	09020606020	0.33	0.33	0	SC	0.3	0.3
Limnephilidae	09020610				--		
<i>Psilotreta</i>	09020614068		1.67	0	SC		1.7
<i>Psilotreta labida</i>	09020614068133	1.67			--	1.7	
Leptoceridae	09020618				--		
Chironomidae	09021011	0.67			--	0.7	
<i>Conchapelopia</i>	09021011004	0.67	0.69	6	PR	0.7	0.7
<i>Rheopelopia</i>	09021011017		0.69		PR		0.7
<i>Rheopelopia acra group</i>	09021011017036	0.67			--	0.7	
<i>Trissopelopia</i>	09021011021		1.03		PR		1.1
<i>Trissopelopia ogemawi</i>	09021011021042	1.00			--	1.0	
<i>Pagastia</i>	09021011025		0.34	1	--		0.4
<i>Pagastia orthogonia</i>	09021011025001	0.33			--	0.3	
<i>Brillia</i>	09021011033	0.33	0.34	5	SH	0.3	0.4
<i>Corynoneura</i>	09021011036	0.33	0.34	7	CG	0.3	0.4
<i>Cricotopus</i>	09021011037	0.33	4.47	7	SH	0.3	4.6
<i>Cricotopus bicinctus</i>	09021011037057	3.33			--	3.4	
<i>Cricotopus trifascia</i>	09021011037070	0.67			--	0.7	
<i>Eukiefferiella</i>	09021011041		0.69	8	CG		0.7
<i>Eukiefferiella brehmi group</i>	09021011041073	0.67			--	0.7	
<i>Orthocladius</i>	09021011050	0.33	1.72	6	CG	0.3	1.8
<i>Orthocladius annectens</i>	09021011050092	1.33			--	1.4	
<i>Parametriocnemus</i>	09021011053	1.33	1.38	5	CG	1.4	1.4
<i>Rheocricotopus</i>	09021011057		0.34	6	CG		0.4
<i>Rheocricotopus pauciseta</i>	09021011057111	0.33			--	0.3	
<i>Thienemanniella</i>	09021011062		0.34	6	CG		0.4
<i>Thienemanniella xena</i>	09021011062110	0.33			--	0.3	
<i>Tvetenia</i>	09021011065		0.34	5	CG		0.4
<i>Tvetenia paucunca</i>	09021011065114	0.33			--	0.3	
<i>Micropsectra</i>	09021011070	0.67	0.69	7	CG	0.7	0.7
<i>Rheotanytarsus</i>	09021011072	6.67	6.88	6	CF	6.9	7.1
<i>Tanytarsus</i>	09021011076	0.67	0.69	6	CF	0.7	0.7



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 1668

Subsample Factor: X1

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>Microtendipes</i>	09021011094		0.34	6	CF		0.4
<i>Microtendipes rydalensis group</i>	09021011094168	0.33			--	0.3	
<i>Polypedilum</i>	09021011102		0.69	6	SH		0.7
<i>Polypedilum aviceps</i>	09021011102181	0.67			--	0.7	
<i>Ectopria</i>	09021109059	0.33	0.33	5	SC	0.3	0.3
<i>Promoresia</i>	09021113069		2.33		--		2.4
<i>Promoresia tardella</i>	09021113069052	2.33			--	2.4	