



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

Station Information

Station Number: S-664	DEP Drainage: Androscoggin
Waterbody: West Branch Nezinscot River - Station 664	HUC8: 01040002
Town: Sumner	HUC8 Name: Lower Androscoggin
Directions: UPSTREAM OF ATV CROSSING, APPROXIMATELY 1 KM UPSTREAM OF N. BUCKFIELD RD.	Latitude: 44 19 5.01 N
	Longitude: 70 24 39.27 W
	Stream Order:

Sample Information

Log Number: 1732	Type of Sample: ROCK BAG	Date Deployed: 7/21/2008
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/18/2008

Classification Attainment

Statutory Class: A	Final Determination: A	Date: 7/9/2009
Model Result with P>.6: A	Reason for Determination: Model	
Date Last Calculated: 7/7/2009	Comments:	

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.85	Class C	0.00	Class A, B, or C	1.00
Class B	0.15	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	232.67	18 Relative Abundance Ephemeroptera	0.15
02 Generic Richness	44.00	19 EPT Generic Richness	21.00
03 Plecoptera Mean Abundance	7.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	2.05
04 Ephemeroptera Mean Abundance	34.67	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	3.66	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	2.72
06 Hilsenhoff Biotic Index	3.39	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	12.51
07 Relative Abundance - Chironomidae	0.22	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.41	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	45.98		
11 <i>Cheumatopsyche</i> Abundance	1.35		
12 EPT Generic Richness/ Diptera Generic Richness	1.17		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	7.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.03		
17 Chironomini Abundance (Family Functional Group)	31.15		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	19.76
2	<i>Brachycentrus</i>	19.05
3	<i>Simulium</i>	16.33
4	<i>Polypedilum</i>	13.10
5	<i>Baetis</i>	5.86



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Town: Sumner

Date Deployed: 7/21/2008

Log Number: 1732

Waterbody: West Branch Nezinscot River - Station 6

Date Retrieved: 8/18/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 19.5 deg C
Dissolved Oxygen: 8 mg/l
Specific Conductance: 19 uS/cm
Velocity: 125 cm/s
pH: 6.17
Wetted Width: 13.2 m
Bankfull Width: 13.2 m
Depth: 35 cm

Waterbody Information - Retrieval

Temperature: 18.1 deg C
Dissolved Oxygen: 8.7 mg/l
Specific Conductance: 24 uS/cm
Velocity: 73 cm/s
pH: 6.18
Wetted Width: 13 m
Bankfull Width: 13.2 m
Depth: 32 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Upland Conifer

Upland Hardwood

Canopy Cover

Canopy Partly Open

Terrain

Rolling Terrain

Stressor

Location

Main Stem

Substrate

Boulder 25 %
Gravel 15 %
Rubble/Cobble 50 %
Sand 10 %

Landcover Summary - 2004 Data

Total Area (ac)	18439	High Int. Dev. %	0.0	Water %	1.3	Non-vegetated %	0.0
Total Land (ac)	18197	Med Int. Dev. %	0.0	Wetland %	4.1	Tilled Agriculture %	0.3
		Low Int. Dev. %	1.0	Upland Woody %	92.2	Human Altered %	2.8
		Development %	1.1	Natural %	97.2	Impervious %	1.3

Sample Comments

7/21/08: WATER LEVEL HIGH



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

Station Number: S-664 Waterbody: West Branch Nezinscot River - Station 664 Town: Sumner
Log Number: 1732 Subsample Factor: X1 Replicates: 3 Calculated: 7/7/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Perlidae	09020209	1.00			--	0.4	
<i>Acroneuria</i>	09020209042		6.18	0	PR		2.7
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	2.3	
<i>Attaneuria</i>	09020209043		0.77	1	--		0.3
<i>Attaneuria ruralis</i>	09020209043128	0.67			--	0.3	
<i>Paragnetina</i>	09020209049		0.39	1	PR		0.2
<i>Paragnetina immarginata</i>	09020209049149	0.33			--	0.1	
Baetidae	09020401	1.00			--	0.4	
<i>Baetis</i>	09020401001	1.67	13.63	4	CG	0.7	5.9
<i>Baetis flavistriga</i>	09020401001004	0.33			--	0.1	
<i>Baetis intercalaris</i>	09020401001008	3.67			--	1.6	
<i>Baetis tricaudatus</i>	09020401001012	7.33			--	3.2	
<i>Acerpenna</i>	09020401007	0.67	3.84	5	CG	0.3	1.7
<i>Acerpenna macdunnoughi</i>	09020401007001	2.67			--	1.1	
<i>Acerpenna pygmaea</i>	09020401007011	0.33			--	0.1	
<i>Plauditus</i>	09020401012	4.00	4.19		CG	1.7	1.8
<i>Epeorus</i>	09020402009	1.67	1.67	0	SC	0.7	0.7
<i>Maccaffertium</i>	09020402015	2.33	6.33	4	SC	1.0	2.7
<i>Maccaffertium luteum</i>	09020402015049	4.00			--	1.7	
<i>Isonychia</i>	09020404018	0.33	0.33	2	CF	0.1	0.1
<i>Ephemerella</i>	09020410035	1.33	1.33	1	CG	0.6	0.6
<i>Serratella</i>	09020410037		1.33	2	CG		0.6
<i>Serratella serratoides</i>	09020410037124	1.33			--	0.6	
<i>Tricorythodes</i>	09020411038	2.00	2.00	4	CG	0.9	0.9
<i>Dolophilodes</i>	09020601001	0.33	0.33	0	CF	0.1	0.1
<i>Chimarra</i>	09020601003	1.33	1.33	2	CF	0.6	0.6
<i>Neureclipsis</i>	09020603008	0.67	0.67	7	CF	0.3	0.3
Hydropsychidae	09020604	0.67			--	0.3	
<i>Cheumatopsyche</i>	09020604015	1.33	1.35	5	CF	0.6	0.6
<i>Hydropsyche</i>	09020604016	20.67	45.98	4	CF	8.9	19.8
<i>Hydropsyche bronta</i>	09020604016029	1.00			--	0.4	
<i>Hydropsyche morosa</i>	09020604016030	16.67			--	7.2	
<i>Hydropsyche sparna</i>	09020604016032	5.33			--	2.3	
<i>Hydropsyche depravata complex</i>	09020604016041	1.67			CF	0.7	
<i>Rhyacophila</i>	09020605019	0.33	3.00	2	PR	0.1	1.3
<i>Rhyacophila minor</i>	09020605019063	2.67			PR	1.1	
<i>Brachycentrus</i>	09020609043		44.33	0	CF		19.1
<i>Brachycentrus appalachia</i>	09020609043096	44.33			--	19.1	



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		Actual	Adjusted			Actual	Adjusted
<i>Lepidostoma</i>	09020611064	0.67	0.67	1	SH	0.3	0.3
<i>Oecetis</i>	09020618078		0.33	8	PR		0.1
<i>Oecetis persimilis</i>	09020618078157	0.33			--	0.1	
<i>Nigronia</i>	09020701003		0.33	0	PR		0.1
<i>Nigronia serricornis</i>	09020701003003	0.33			--	0.1	
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.1	0.1
Chironomidae	09021011	1.33			--	0.6	
<i>Rheopelopia</i>	09021011017		1.03		PR		0.4
<i>Rheopelopia acra group</i>	09021011017036	1.00			--	0.4	
<i>Cricotopus</i>	09021011037	0.33	1.03	7	SH	0.1	0.4
<i>Cricotopus bicinctus</i>	09021011037057	0.67			--	0.3	
<i>Eukiefferiella</i>	09021011041		1.03	8	CG		0.4
<i>Eukiefferiella brehmi group</i>	09021011041073	1.00			--	0.4	
<i>Nanocladius</i>	09021011049		2.74	3	CG		1.2
<i>Nanocladius branchicolus</i>	09021011049091	1.00			--	0.4	
<i>Nanocladius downesi</i>	09021011049092	1.67			--	0.7	
<i>Parametriocnemus</i>	09021011053	0.33	0.34	5	CG	0.1	0.1
<i>Rheocricotopus</i>	09021011057		0.68	6	CG		0.3
<i>Rheocricotopus robacki</i>	09021011057105	0.67			--	0.3	
<i>Tvetenia</i>	09021011065		5.14	5	CG		2.2
<i>Tvetenia vitracies</i>	09021011065113	5.00			--	2.1	
<i>Micropsectra</i>	09021011070	2.00	2.05	7	CG	0.9	0.9
<i>Rheotanytarsus</i>	09021011072	4.67	4.79	6	CF	2.0	2.1
<i>Stempellinella</i>	09021011074		0.34	2	--		0.1
<i>Stempellinella leptocelloides</i>	09021011074001	0.33			--	0.1	
<i>Tanytarsus</i>	09021011076	0.33	0.34	6	CF	0.1	0.1
<i>Microtendipes</i>	09021011094		0.34	6	CF		0.1
<i>Microtendipes rydalensis group</i>	09021011094168	0.33			--	0.1	
<i>Nilothauma</i>	09021011095	0.33	0.34	2	--	0.1	0.1
<i>Polypedilum</i>	09021011102		30.47	6	SH		13.1
<i>Polypedilum aviceps</i>	09021011102181	27.67			--	11.9	
<i>Polypedilum flavum</i>	09021011102182	2.00			--	0.9	
<i>Simulium</i>	09021012047		38.00	4	CF		16.3
<i>Simulium fibrinflatum</i>	09021012047059	1.00			--	0.4	
<i>Simulium tuberosum</i>	09021012047067	24.33			--	10.5	
<i>Simulium jenningsi complex</i>	09021012047070	11.33			CF	4.9	
<i>Simulium venustum/verecundum complex</i>	09021012047072	1.33			CF	0.6	



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		Actual	Adjusted			Actual	Adjusted
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.1	0.1
<i>Neoplata</i>	09021016064	0.33	0.33		PR	0.1	0.1
<i>Dubiraphia</i>	09021113064	0.33	0.33	6	--	0.1	0.1
<i>Promoresia</i>	09021113069		1.67		--		0.7
<i>Promoresia tardella</i>	09021113069052	1.67			--	0.7	
<i>Stenelmis</i>	09021113070		0.33	5	SC		0.1
<i>Stenelmis crenata</i>	09021113070055	0.33			--	0.1	
<i>Ferrissia</i>	10010204035		0.33		SC		0.1
<i>Ferrissia rivularis</i>	10010204035066	0.33			--	0.1	