



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

Station Information

Station Number:	S-103	DEP Drainage:	Androscoggin
Waterbody:	Wild River - Station 103	HUC8:	01040002
Town:	Gilead	HUC8 Name:	Lower Androscoggin
Directions:	1 KM ABOVE CONFLUENCE WITH ANDROSCOGGIN RIVER	Latitude:	44 23 17.93 N
		Longitude:	70 58 47.14 W
		Stream Order:	4

Sample Information

Log Number:	1741	Type of Sample:	ROCK BAG	Date Deployed:	7/23/2008
Subsample Factor:	X1	Replicates:	3	Date Retrieved:	8/20/2008

Classification Attainment

Statutory Class:	AA	Final Determination:	A	Date:	5/20/2009
Model Result with P>.6:	A	Reason for Determination:	Model		
Date Last Calculated:	5/19/2009	Comments:			

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.74	Class C	0.02	Class A, B, or C	1.00
Class B	0.24	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	67.33	18 Relative Abundance Ephemeroptera	0.49
02 Generic Richness	36.00	19 EPT Generic Richness	23.00
03 Plecoptera Mean Abundance	2.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	3.39
04 Ephemeroptera Mean Abundance	32.67	23 Relative Generic Richness- Plecoptera	0.11
05 Shannon-Wiener Generic Diversity	3.94	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1.70
06 Hilsenhoff Biotic Index	4.28	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	13.67
07 Relative Abundance - Chironomidae	0.28	28 EP Generic Richness/14	1.07
08 Relative Generic Richness Diptera	0.28	30 Presence of Class A Indicator Taxa/7	0.57
09 <i>Hydropsyche</i> Abundance	0.33		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	2.30		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.02		
17 Chironomini Abundance (Family Functional Group)	2.38		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	20.30
2	<i>Acerpenna</i>	14.85
3	<i>Rheotanytarsus</i>	14.11
4	<i>Brachycentrus</i>	10.89
5	<i>Micropsectra</i>	4.54



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Station Number: S-103

Town: Gilead

Date Deployed: 7/23/2008

Log Number: 1741

Waterbody: Wild River - Station 103

Date Retrieved: 8/20/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 17.1 deg C
Dissolved Oxygen: 8.7 mg/l
Specific Conductance: 9 uS/cm
Velocity: 36 cm/s
pH: 6.16
Wetted Width: 24 m
Bankfull Width: 33 m
Depth: 60 cm

Waterbody Information - Retrieval

Temperature: 14 deg C
Dissolved Oxygen: 9.1 mg/l
Specific Conductance: 8 uS/cm
Velocity: 18 cm/s
pH: 6.12
Wetted Width: 30 m
Bankfull Width: 33 m
Depth: 54 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Canopy Cover

Terrain

Upland Conifer

Canopy Open

Mountainous Terrain

Upland Hardwood

Stressor

Location

Substrate

Main Stem

Boulder 30 %

Pristine Landscape

Gravel 10 %

Rubble/Cobble 55 %

Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	13571	High Int. Dev. %	0.0	Water %	0.1	Non-vegetated %	0.1
Total Land (ac)	13561	Med Int. Dev. %	0.0	Wetland %	0.6	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.2	Upland Woody %	99.2	Human Altered %	0.3
		Development %	0.3	Natural %	99.7	Impervious %	0.4

Sample Comments



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

Station Number: S-103

Waterbody: Wild River - Station 103

Town: Gilead

Log Number: 1741

Subsample Factor: X1

Replicates: 3

Calculated: 5/19/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Nais</i>	08020202009		0.33		CG		0.5
<i>Nais behningi</i>	08020202009003	0.33			--	0.5	
Perlodidae	09020207	0.33	0.33		--	0.5	0.5
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.5	0.5
<i>Sweltsa</i>	09020208040	0.67	0.67		PR	1.0	1.0
<i>Agnetina</i>	09020209050		0.67	2	PR		1.0
<i>Agnetina capitata</i>	09020209050152	0.67		2	PR	1.0	
<i>Baetis</i>	09020401001		0.67	4	CG		1.0
<i>Baetis tricaudatus</i>	09020401001012	0.67			--	1.0	
<i>Acerpenna</i>	09020401007	2.33	10.00	5	CG	3.5	14.9
<i>Acerpenna macdunnoughi</i>	09020401007001	7.67			--	11.4	
<i>Plauditus</i>	09020401012		0.33		CG		0.5
<i>Plauditus cestus</i>	09020401012004	0.33			--	0.5	
<i>Leucrocuta</i>	09020402011	0.33	0.33	1	SC	0.5	0.5
<i>Stenacron</i>	09020402014		2.33	7	SC		3.5
<i>Stenacron interpunctatum</i>	09020402014045	2.33			--	3.5	
<i>Maccaffertium</i>	09020402015	6.33	13.67	4	SC	9.4	20.3
<i>Maccaffertium luteum</i>	09020402015049	7.33			--	10.9	
Leptophlebiidae	09020406	0.33	0.33		--	0.5	0.5
Ephemerellidae	09020410	0.67			--	1.0	
<i>Attenella</i>	09020410032		0.50	3	CG		0.7
<i>Attenella attenuata</i>	09020410032095	0.33			CG	0.5	
<i>Ephemerella</i>	09020410035		0.50	1	CG		0.7
<i>Ephemerella invaria</i>	09020410035107	0.33			--	0.5	
<i>Serratella</i>	09020410037		1.00	2	CG		1.5
<i>Serratella serratoides</i>	09020410037124	0.67			--	1.0	
<i>Tricorythodes</i>	09020411038	3.00	3.00	4	CG	4.5	4.5
<i>Cernotina</i>	09020603006	1.67	1.67		PR	2.5	2.5
<i>Neureclipsis</i>	09020603008	0.33	0.33	7	CF	0.5	0.5
<i>Nyctiophylax</i>	09020603009		0.33	5	PR		0.5
<i>Nyctiophylax moestus</i>	09020603009013	0.33			--	0.5	
<i>Hydropsyche</i>	09020604016	0.33	0.33	4	CF	0.5	0.5
<i>Rhyacophila</i>	09020605019		2.00	2	PR		3.0
<i>Rhyacophila minor</i>	09020605019063	2.00			PR	3.0	
<i>Brachycentrus</i>	09020609043		7.33	0	CF		10.9
<i>Brachycentrus appalachia</i>	09020609043096	7.33			--	10.9	
<i>Lepidostoma</i>	09020611064	0.33	0.33	1	SH	0.5	0.5
<i>Psilotreta</i>	09020614068	0.33	0.33	0	SC	0.5	0.5



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Calculated: 5/19/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Chironomidae	09021011	0.33			--	0.5	
<i>Conchapelopia</i>	09021011004	0.33	0.34	6	PR	0.5	0.5
<i>Rheopelopia</i>	09021011017		0.68		PR		1.0
<i>Rheopelopia acra group</i>	09021011017036	0.67			--	1.0	
<i>Corynoneura</i>	09021011036	0.33	0.34	7	CG	0.5	0.5
<i>Cricotopus</i>	09021011037	0.33	1.70	7	SH	0.5	2.5
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	2.0	
<i>Rheocricotopus</i>	09021011057		0.34	6	CG		0.5
<i>Rheocricotopus tuberculatus</i>	09021011057106	0.33			--	0.5	
<i>Tvetenia</i>	09021011065		0.68	5	CG		1.0
<i>Tvetenia vitracies</i>	09021011065113	0.33			--	0.5	
<i>Tvetenia paucunca</i>	09021011065114	0.33			--	0.5	
<i>Micropsectra</i>	09021011070	3.00	3.05	7	CG	4.5	4.5
<i>Rheotanytarsus</i>	09021011072	9.33	9.50	6	CF	13.9	14.1
<i>Dicrotendipes</i>	09021011085	0.33	0.34	8	CG	0.5	0.5
<i>Polypedilum</i>	09021011102		2.04	6	SH		3.0
<i>Polypedilum aviceps</i>	09021011102181	2.00			--	3.0	
<i>Promoresia</i>	09021113069		0.33		--		0.5
<i>Promoresia tardella</i>	09021113069052	0.33			--	0.5	
<i>Stenelmis</i>	09021113070		0.33	5	SC		0.5
<i>Stenelmis crenata</i>	09021113070055	0.33			--	0.5	