



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

Station Information

**Station Number: S-868**  
Waterbody: Kennebago River - Station 868  
Town: Rangeley  
Directions: RTE 16 TO BOY SCOUT ROAD; FOLLOW ROAD UNTIL JUST BEFORE GATE (~1 MILE); FOLLOW STEPS (LEFT) DOWN TO RIVER

DEP Drainage: Androscoggin  
HUC8 Name: Upper Androscoggin  
Latitude: 45 0 34.75 N  
Longitude: 70 47 29.46 W  
Stream Order: 4

Sample Information

**Log Number: 2199**  
Subsample Factor: X1  
Type of Sample: ROCK BASKET  
Replicates: 3  
Date Deployed: 7/17/2013  
Date Retrieved: 8/14/2013

Classification Attainment

**Statutory Class: AA**  
Model Result with P>.6: A  
Date Last Calculated: 1/29/2014  
**Final Determination: A**  
**Reason for Determination: Model**  
Comments:

Date: 1/30/2014

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.77	Class A, B, or C	1.00
Class B	0.21	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.98
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.02

Model Variables

01 Total Mean Abundance	83.67	18 Relative Abundance Ephemeroptera	0.57
02 Generic Richness	43.00	19 EPT Generic Richness	23.00
03 Plecoptera Mean Abundance	0.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.33
04 Ephemeroptera Mean Abundance	48.00	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	4.31	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	13.00
06 Hilsenhoff Biotic Index	4.25	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.69
07 Relative Abundance - Chironomidae	0.20	28 EP Generic Richness/14	0.79
08 Relative Generic Richness Diptera	0.23	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	1.67		
11 <i>Cheumatopsyche</i> Abundance	2.67		
12 EPT Generic Richness/ Diptera	2.30		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family	0.00		
Functional Group)			
16 Tanypodinae Mean Abundance	4.00		
(Family Functional Group)			
17 Chironomini Abundance (Family	3.00		
Functional Group)			

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Procloeon</i>	15.94
2	<i>Leptophlebiidae</i>	13.94
3	<i>Tricorythodes</i>	9.96
4	<i>Leucrocuta</i>	8.24
5	<i>Tanytarsus</i>	7.97



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**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature:	23.2 deg C
Dissolved Oxygen:	8.7 mg/l
Specific Conductance:	28 uS/cm
Velocity:	11.2 cm/s
pH:	6.5
Wetted Width:	27 m
Bankfull Width:	27 m
Depth:	85 cm

**Waterbody Information - Retrieval**

Temperature:	18.5 deg C
Dissolved Oxygen:	9.4 mg/l
Specific Conductance:	20 uS/cm
Velocity:	10.1 cm/s
pH:	6.83
Wetted Width:	25 m
Bankfull Width:	27 m
Depth:	70 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

Landuse Name

Upland Conifer

Upland Hardwood

Potential Stressor

Canopy Cover

Open

Location

Main Stem

Minimally Disturbed

Terrain

Mountainous

Substrate

Bedrock	2 %
Boulder	3 %
Gravel	40 %
Rubble/Cobble	50 %
Sand	5 %

**Landcover Summary - 2004 Data**

Total Area (ac)	83050	High Int. Dev. %	0.0	Water %	3.8	Non-vegetated %	0.1
		Med Int. Dev. %	0.0	Wetland %	4.0	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.4	Upland Woody %	91.6	Grassland %	0.0
		Development %	0.4	Natural %	95.6	Human Altered %	0.5
						Impervious %	0.1

**Sample Comments**

8/14/2013 - FISH OBSERVED



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

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Subsample Factor: X1

Replicates: 3

Calculated: 1/29/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Isoperla</i>	09020207026	0.67	0.67	2	PR	0.8	0.8
<i>Boyeria</i>	09020301004	0.67	2.33	2	PR	0.8	2.8
<i>Boyeria vinosa</i>	09020301004012	1.67			--	2.0	
<i>Macromia</i>	09020304021	0.33	0.33	2	PR	0.4	0.4
Corduliidae	09020305	0.33	0.33		--	0.4	0.4
<i>Helocordulia</i>	09020305025		0.67		PR		0.8
<i>Helocordulia selysii</i>	09020305025051	0.67			--	0.8	
Calopterygidae	09020307	0.33	0.33		--	0.4	0.4
<i>Baetis</i>	09020401001		0.33	4	CG		0.4
<i>Baetis intercalaris</i>	09020401001008	0.33			--	0.4	
<i>Callibaetis</i>	09020401002	0.67	0.67	9	CG	0.8	0.8
<i>Procloeon</i>	09020401010	13.33	13.33		CG	15.9	15.9
Heptageniidae	09020402	0.33			--	0.4	
<i>Epeorus</i>	09020402009	0.33	0.34	0	SC	0.4	0.4
<i>Leucrocuta</i>	09020402011	6.67	6.90	1	SC	8.0	8.2
<i>Stenacron</i>	09020402014	1.00	2.07	7	SC	1.2	2.5
<i>Stenacron interpunctatum</i>	09020402014045	1.00			--	1.2	
<i>Maccaffertium</i>	09020402015	0.33	0.69	4	SC	0.4	0.8
<i>Maccaffertium luteum</i>	09020402015049	0.33			--	0.4	
Leptophlebiidae	09020406	11.67	11.67		--	13.9	13.9
<i>Paraleptophlebia</i>	09020406026	3.67	3.67	1	CG	4.4	4.4
<i>Tricorythodes</i>	09020411038	8.33	8.33	4	CG	10.0	10.0
<i>Chimarra</i>	09020601003		0.67	2	CF		0.8
<i>Chimarra obscura</i>	09020601003003	0.67			--	0.8	
<i>Nyctiophylax</i>	09020603009		0.33	5	PR		0.4
<i>Nyctiophylax moestus</i>	09020603009013	0.33			--	0.4	
<i>Polycentropus</i>	09020603010	3.00	3.00	6	PR	3.6	3.6
<i>Cheumatopsyche</i>	09020604015	2.67	2.67	5	CF	3.2	3.2
<i>Hydropsyche</i>	09020604016	1.00	1.67	4	CF	1.2	2.0
<i>Hydropsyche morosa</i>	09020604016030	0.67			--	0.8	
<i>Oxyethira</i>	09020607028	0.33	0.33	3	P	0.4	0.4
<i>Pycnopsyche</i>	09020610049	0.33	0.33	4	SH	0.4	0.4
<i>Apatania</i>	09020610061	0.33	0.33		SC	0.4	0.4
<i>Psilotreta</i>	09020614068	0.33	0.33	0	SC	0.4	0.4
<i>Ceraclea</i>	09020618072	0.33	0.33	3	CG	0.4	0.4
<i>Mystacides</i>	09020618075		0.33	4	CG		0.4
<i>Mystacides sepulchralis</i>	09020618075147	0.33			--	0.4	
<i>Triaenodes</i>	09020618077	0.67	0.67	6	SH	0.8	0.8



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Chironomidae	09021011				--		
<i>Ablabesmyia</i>	09021011001	1.33	3.67	8	PR	1.6	4.4
<i>Ablabesmyia mallochi</i>	09021011001004	2.33			--	2.8	
<i>Conchapelopia</i>	09021011004	0.33	0.33	6	PR	0.4	0.4
<i>Labrundinia</i>	09021011008			7	PR		
<i>Zavreliomyia</i>	09021011022			8	PR		
<i>Eukiefferiella</i>	09021011041	0.33	0.33	8	CG	0.4	0.4
<i>Orthocladius</i>	09021011050		1.00	6	CG		1.2
<i>Orthocladius annectens</i>	09021011050092	1.00			--	1.2	
<i>Rheocricotopus</i>	09021011057			6	CG		
<i>Stempellinella</i>	09021011074	0.33	1.33	2	--	0.4	1.6
<i>Stempellinella fimbriata</i>	09021011074002	1.00			--	1.2	
<i>Tanytarsus</i>	09021011076	6.67	6.67	6	CF	8.0	8.0
<i>Pseudochironomus</i>	09021011078	0.33	0.33	5	CG	0.4	0.4
<i>Dicrotendipes</i>	09021011085		0.33	8	CG		0.4
<i>Dicrotendipes neomodestus</i>	09021011085152	0.33			--	0.4	
<i>Microtendipes</i>	09021011094		2.00	6	CF		2.4
<i>Microtendipes rydalensis group</i>	09021011094168	2.00			--	2.4	
<i>Phaenopsectra</i>	09021011101		0.33	7	SC		0.4
<i>Phaenopsectra obediens</i>	09021011101182	0.33			SC	0.4	
<i>Macronychus</i>	09021113065		0.33	4	--		0.4
<i>Macronychus glabratus</i>	09021113065040	0.33			--	0.4	
<i>Stenelmis</i>	09021113070	0.33	1.00	5	SC	0.4	1.2
<i>Stenelmis crenata</i>	09021113070055	0.67			--	0.8	
<i>Amnicola</i>	10010104013		1.67		SC		2.0
<i>Amnicola limosa</i>	10010104013018	1.67			--	2.0	
<i>Ferrissia</i>	10010204035		0.33		SC		0.4
<i>Ferrissia rivularis</i>	10010204035066	0.33			--	0.4	
<i>Pisidium</i>	10020201002	0.33	0.33		CF	0.4	0.4