



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

**Station Information**

<b>Station Number:</b> S-340	River Basin: Androscoggin
Waterbody: Bird Brook - Station 340	HUC8 Name: Lower Androscoggin
Town: Norway	Latitude: 44 12 43.42 N
Directions: ABOVE RT.117 CROSSING	Longitude: 70 32 15.23 W
	Stream Order: 2

**Sample Information**

<b>Log Number:</b> 2664	Type of Sample: ROCK BAG	Date Deployed: 7/18/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/15/2018

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> C	Date: 12/12/2018
Model Result with $P \geq 0.6$ : C	<b>Reason for Determination:</b> Model	
Date Last Calculated: 12/12/2018	Comments:	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.02	Class A, B, or C	1.00
Class B	0.05	Non-Attainment	0.00
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	0.01
Class A or B	0.01	Class B or C or Non-Attainment	0.99
Class C or Non-Attainment	0.99		

**Model Variables**

01 Total Mean Abundance	69.67	18 Relative Abundance Ephemeroptera	0.33
02 Generic Richness	29.00	19 EPT Generic Richness	12.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	23.33	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	4.00	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	9.67
06 Hilsenhoff Biotic Index	4.30	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	10.67
07 Relative Abundance - Chironomidae	0.42	28 EP Generic Richness/14	0.50
08 Relative Generic Richness Diptera	0.41	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	3.00		
11 <i>Cheumatopsyche</i> Abundance	3.67		
12 EPT Generic Richness/ Diptera Generic Richness	1.00		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	8.33		
17 Chironomini Abundance (Family Functional Group)	1.33		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	15.31
2	<i>Paraleptophlebia</i>	13.40
3	<i>Rheotanytarsus</i>	10.53
4	<i>Thienemannimyia</i>	9.57
5	<i>Tanytarsus</i>	7.18



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**Log Number: 2664**      Waterbody: Bird Brook - Station 340      Date Retrieved: 8/15/2018

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

**Waterbody Information - Deployment**

Temperature: 21.6 deg C  
Dissolved Oxygen: 4.7 mg/l  
Dissolved Oxygen Saturation: 53.4 %  
Specific Conductance: 77.6 uS/cm  
Velocity: 12.2 cm/s  
pH: 6.61  
Wetted Width: 4 m  
Bankfull Width: 5.9 m  
Depth: 30 cm

**Waterbody Information - Retrieval**

Temperature: 23 deg C  
Dissolved Oxygen: 2.62 mg/l  
Dissolved Oxygen Saturation: 30.6 %  
Specific Conductance: 104.5 uS/cm  
Velocity:  
pH: 6.64  
Wetted Width: 5.8 m  
Bankfull Width: 5.9 m  
Depth: 29 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Dense	Rolling
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
BOD (Low DO)	Below Urban NPS	Boulder 30 %
Urban Runoff	Main Stem	Gravel 25 %
		Rubble/Cobble 30 %
		Sand 15 %

**Landcover Summary - 2004 Data**

Total Area (ac)	4701	High Int. Dev. %	1.7	Water %	0.0	Non-vegetated %	0.1
		Med Int. Dev. %	1.5	Wetland %	8.6	Tilled Agriculture %	1.3
		Low Int. Dev. %	3.0	Upland Woody %	77.7	Grassland %	5.0
		Development %	6.2	Natural %	86.4	Human Altered %	13.6
						Impervious %	4.7

**Sample Comments**

8/15: VISIBLE FLOW



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Aquatic Life Taxonomic Inventory Report**

**Station Number: S-340**

Waterbody: Bird Brook - Station 340

Town: Norway

**Log Number: 2664**

Subsample Factor: X1

Replicates: 3

Calculated: 12/12/2018

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
Cambaridae	09010301	0.67	0.67		--	1.0	1.0
<i>Orconectes</i>	09010301008	0.33	0.33		CG	0.5	0.5
<i>Boyeria</i>	09020301004		1.00	2	PR		1.4
<i>Boyeria grafiana</i>	09020301004011	0.33			--	0.5	
<i>Boyeria vinosa</i>	09020301004012	0.67			--	1.0	
<i>Baetis</i>	09020401001		1.33	4	CG		1.9
<i>Baetis flavistriga</i>	09020401001004	1.00			--	1.4	
<i>Baetis intercalaris</i>	09020401001008	0.33			--	0.5	
<i>Acerpenna</i>	09020401007		0.33	5	CG		0.5
<i>Acerpenna pygmaea</i>	09020401007011	0.33			--	0.5	
<i>Labiobaetis</i>	09020401009	0.33	0.33		--	0.5	0.5
<i>Stenacron</i>	09020402014	0.33	1.00	7	SC	0.5	1.4
<i>Stenacron interpunctatum</i>	09020402014045	0.67			--	1.0	
<i>Maccaffertium</i>	09020402015	7.33	10.67	4	SC	10.5	15.3
<i>Maccaffertium modestum</i>	09020402015051	3.33			--	4.8	
<i>Paraleptophlebia</i>	09020406026	9.33	9.33	1	CG	13.4	13.4
<i>Ephemerella</i>	09020410035	0.33	0.33	1	CG	0.5	0.5
<i>Chimarra</i>	09020601003		0.33	2	CF		0.5
<i>Chimarra aterrima</i>	09020601003002	0.33			--	0.5	
<i>Lype</i>	09020602004		0.33	2	SC		0.5
<i>Lype diversa</i>	09020602004005	0.33			--	0.5	
<i>Cheumatopsyche</i>	09020604015	3.67	3.67	5	CF	5.3	5.3
<i>Hydropsyche</i>	09020604016	0.33	3.00	4	CF	0.5	4.3
<i>Hydropsyche bronta</i>	09020604016029	1.00			--	1.4	
<i>Hydropsyche morosa</i>	09020604016030	0.33			--	0.5	
<i>Hydropsyche betteni</i>	09020604016037	1.00			--	1.4	
<i>Hydropsyche scalaris species group</i>	09020604016048	0.33			--	0.5	
<i>Pycnopsyche</i>	09020610049	1.00	1.00	4	SH	1.4	1.4
Chironomidae	09021011				--		
<i>Ablabesmyia</i>	09021011001	1.00	1.00	8	PR	1.4	1.4
<i>Labrundinia</i>	09021011008		0.67	7	PR		1.0
<i>Labrundinia pilosella</i>	09021011008022	0.67			--	1.0	
<i>Thienemannimyia</i>	09021011020		6.67	3	PR		9.6
<i>Thienemannimyia group</i>	09021011020041	6.67			--	9.6	
<i>Nanocladius</i>	09021011049	0.33	0.33	3	CG	0.5	0.5
<i>Parametrioctonus</i>	09021011053	2.00	2.00	5	CG	2.9	2.9
<i>Rheocricotopus</i>	09021011057	0.33	0.33	6	CG	0.5	0.5



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		Actual	Adjusted			Actual	Adjusted
<i>Paratanytarsus</i>	09021011071	4.67	4.67	6	--	6.7	6.7
<i>Rheotanytarsus</i>	09021011072		7.33	6	CF		10.5
<i>Rheotanytarsus exiguus group</i>	09021011072127	7.33			CF	10.5	
<i>Tanytarsus</i>	09021011076	5.00	5.00	6	CF	7.2	7.2
<i>Chironomus</i>	09021011080	0.33	0.33	10	CG	0.5	0.5
<i>Glyptotendipes</i>	09021011088	0.67	0.67	10	SH	1.0	1.0
<i>Microtendipes</i>	09021011094		0.33	6	CF		0.5
<i>Microtendipes rydalensis group</i>	09021011094168	0.33			--	0.5	
<i>Stenelmis</i>	09021113070	2.33	2.33	5	SC	3.3	3.3
<i>Ferrissia</i>	10010204035	4.33	4.33		SC	6.2	6.2