



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

Station Information

| | | |
|---|---------------|----------------------|
| Station Number: S-268 | River Basin: | Maine Coastal |
| Waterbody: West Branch Sheepscot River - Station 268 | HUC8 Name: | St. George-Sheepscot |
| Town: China | Latitude: | 44 22 4.48 N |
| Directions: WEEKS MILLS - 100 FT UPSTREAM OF DIRIGO RD CROSSING | Longitude: | 69 31 52.65 W |
| | Stream Order: | 3 |

Sample Information

| | | | | |
|-------------------------|-----------------|----------|-----------------|-----------|
| Log Number: 2824 | Type of Sample: | ROCK BAG | Date Deployed: | 7/2/2020 |
| Subsample Factor: X1 | Replicates: | 3 | Date Retrieved: | 7/30/2020 |

Classification Attainment

| | | | |
|------------------------------------|--|-------|-----------|
| Statutory Class: AA | Final Determination: A | Date: | 4/23/2021 |
| Model Result with $P \geq 0.6$: A | Reason for Determination: Model | | |
| Date Last Calculated: 4/22/2021 | Comments: | | |

Model Probabilities

| | | | |
|---------------------------|------|--------------------------------|------|
| <u>First Stage Model</u> | | <u>C or Better Model</u> | |
| Class A | 0.76 | Class C | 0.00 |
| Class B | 0.23 | NA | 0.00 |
| <u>B or Better Model</u> | | <u>A Model</u> | |
| Class A or B | 1.00 | Class A | 0.99 |
| Class C or Non-Attainment | 0.00 | Class B or C or Non-Attainment | 0.01 |

Model Variables

| | | | |
|--|--------|---|-------|
| 01 Total Mean Abundance | 387.67 | 18 Relative Abundance Ephemeroptera | 0.41 |
| 02 Generic Richness | 74.00 | 19 EPT Generic Richness | 23.00 |
| 03 Plecoptera Mean Abundance | 7.00 | 21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i> | 0.00 |
| 04 Ephemeroptera Mean Abundance | 158.00 | 23 Relative Generic Richness- Plecoptera | 0.04 |
| 05 Shannon-Wiener Generic Diversity | 4.65 | 25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i> | 38.00 |
| 06 Hilsenhoff Biotic Index | 5.03 | 26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i> | 24.00 |
| 07 Relative Abundance - Chironomidae | 0.38 | 28 EP Generic Richness/14 | 0.93 |
| 08 Relative Generic Richness Diptera | 0.39 | 30 Presence of Class A Indicator Taxa/7 | 0.43 |
| 09 <i>Hydropsyche</i> Abundance | 1.00 | | |
| 11 <i>Cheumatopsyche</i> Abundance | 3.67 | | |
| 12 EPT Generic Richness/ Diptera Generic Richness | 0.79 | | |
| 13 Relative Abundance - Oligochaeta | 0.00 | | |
| 15 Perlidae Mean Abundance (Family Functional Group) | 1.67 | | |
| 16 Tanypodinae Mean Abundance (Family Functional Group) | 19.00 | | |
| 17 Chironomini Abundance (Family Functional Group) | 58.33 | | |

Five Most Dominant Taxa

| Rank | Taxon Name | Percent |
|------|-----------------------|---------|
| 1 | <i>Tricorythodes</i> | 17.63 |
| 2 | <i>Microtendipes</i> | 11.69 |
| 3 | <i>Rheotanytarsus</i> | 7.05 |
| 4 | <i>Dubiraphia</i> | 6.62 |
| 5 | <i>Maccaffertium</i> | 5.85 |



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Station Number: S-268

Waterbody: West Branch Sheepscot River - Station 268 Town: China

Log Number: 2824

Subsample Factor: X1

Replicates: 3

Calculated: 4/22/2021

| Taxon | Maine Taxonomic Code | Count | | Hilsenhoff Biotic Index | Functional Feeding Group | Relative Abundance % | |
|--|----------------------------|--------------------|----------|-------------------------------|--------------------------------|-------------------------|----------|
| | | (Mean of Samplers) | | | | Actual | Adjusted |
| | | Actual | Adjusted | | | | |
| Platyhelminthes | 03 | 0.33 | 0.33 | | -- | 0.1 | 0.1 |
| <i>Prostoma</i> | 04010101001 | 0.67 | 0.67 | | -- | 0.2 | 0.2 |
| <i>Nais</i> | 08020202009 | | 0.33 | | CG | | 0.1 |
| <i>Nais behningi</i> | 08020202009003 | 0.33 | | | -- | 0.1 | |
| <i>Gammarus</i> | 09010201003 | 0.33 | 0.33 | 4 | -- | 0.1 | 0.1 |
| <i>Leuctra</i> | 09020204020 | 5.33 | 5.33 | 0 | SH | 1.4 | 1.4 |
| <i>Acroneuria</i> | 09020209042 | 1.33 | 1.33 | 0 | PR | 0.3 | 0.3 |
| <i>Perlesta</i> | 09020209046 | 0.33 | 0.33 | 5 | PR | 0.1 | 0.1 |
| <i>Boyeria</i> | 09020301004 | 1.00 | 1.00 | 2 | PR | 0.3 | 0.3 |
| Gomphidae | 09020302 | 1.00 | 1.00 | | -- | 0.3 | 0.3 |
| Macromiidae | 09020304 | 0.33 | 0.33 | | -- | 0.1 | 0.1 |
| Corduliidae | 09020305 | 4.67 | 4.67 | | -- | 1.2 | 1.2 |
| Calopterygidae | 09020307 | 1.00 | 1.00 | | -- | 0.3 | 0.3 |
| <i>Calopteryx</i> | 09020307043 | 2.33 | 2.33 | 5 | PR | 0.6 | 0.6 |
| <i>Argia</i> | 09020309048 | 1.00 | 1.00 | 7 | PR | 0.3 | 0.3 |
| <i>Acerpenna</i> | 09020401007 | | 15.00 | 5 | CG | | 3.9 |
| <i>Acerpenna pygmaea</i> | 09020401007011 | 15.00 | | | -- | 3.9 | |
| <i>Procloeon</i> | 09020401010 | 16.33 | 16.33 | | CG | 4.2 | 4.2 |
| <i>Leucrocuta</i> | 09020402011 | 1.00 | 1.00 | 1 | SC | 0.3 | 0.3 |
| <i>Stenacron</i> | 09020402014 | 0.33 | 8.33 | 7 | SC | 0.1 | 2.1 |
| <i>Stenacron interpunctatum</i> | 09020402014045 | 8.00 | | | -- | 2.1 | |
| <i>Maccaffertium</i> | 09020402015 | 1.67 | 22.67 | 4 | SC | 0.4 | 5.8 |
| <i>Maccaffertium luteum</i> | 09020402015049 | 0.33 | | | -- | 0.1 | |
| <i>Maccaffertium modestum</i> | 09020402015051 | 20.67 | | | -- | 5.3 | |
| Leptophlebiidae | 09020406 | 10.33 | 10.33 | | -- | 2.7 | 2.7 |
| <i>Eurylophella</i> | 09020410036 | 0.33 | 0.33 | 3 | CG | 0.1 | 0.1 |
| <i>Serratella</i> | 09020410037 | | 0.33 | 2 | CG | | 0.1 |
| <i>Serratella deficiens (Teloganopsis deficiens)</i> | 09020410037121 | 0.33 | | | -- | 0.1 | |
| <i>Tricorythodes</i> | 09020411038 | 68.33 | 68.33 | 4 | CG | 17.6 | 17.6 |
| <i>Caenis</i> | 09020412040 | | 15.33 | 7 | CG | | 4.0 |
| <i>Caenis maccafferti</i> | 09020412040132 | 15.33 | | | -- | 4.0 | |
| <i>Polycentropus</i> | 09020603010 | 2.67 | 2.67 | 6 | PR | 0.7 | 0.7 |
| <i>Cheumatopsyche</i> | 09020604015 | 3.67 | 3.67 | 5 | CF | 0.9 | 0.9 |
| <i>Hydropsyche</i> | 09020604016 | 1.00 | 1.00 | 4 | CF | 0.3 | 0.3 |
| <i>Hydroptila</i> | 09020607026 | 0.67 | 0.67 | 6 | P | 0.2 | 0.2 |
| <i>Pycnopsyche</i> | 09020610049 | 3.00 | 3.00 | 4 | SH | 0.8 | 0.8 |
| <i>Lepidostoma</i> | 09020611064 | 0.33 | 0.33 | 1 | SH | 0.1 | 0.1 |



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Log Number: 2824

Subsample Factor: X1

Replicates: 3

Calculated: 4/22/2021

| Taxon | Maine Taxonomic Code | Count (Mean of Samplers) | | Hilsenhoff Biotic Index | Functional Feeding Group | Relative Abundance % | |
|-------------------------------------|----------------------|--------------------------|----------|-------------------------|--------------------------|----------------------|----------|
| | | Actual | Adjusted | | | Actual | Adjusted |
| <i>Helicopsyche</i> | 09020616070 | | 1.33 | 3 | SC | | 0.3 |
| <i>Helicopsyche borealis</i> | 09020616070137 | 1.33 | | | -- | 0.3 | |
| <i>Ceraclea</i> | 09020618072 | 0.67 | 0.67 | 3 | CG | 0.2 | 0.2 |
| <i>Mystacides</i> | 09020618075 | 0.67 | 1.00 | 4 | CG | 0.2 | 0.3 |
| <i>Mystacides sepulchralis</i> | 09020618075147 | 0.33 | | | -- | 0.1 | |
| <i>Oecetis</i> | 09020618078 | 2.00 | 2.00 | 8 | PR | 0.5 | 0.5 |
| <i>Nigronia</i> | 09020701003 | 0.67 | 3.33 | 0 | PR | 0.2 | 0.9 |
| <i>Nigronia serricornis</i> | 09020701003003 | 2.67 | | | -- | 0.7 | |
| <i>Sialis</i> | 09020702004 | 3.33 | 3.33 | 4 | PR | 0.9 | 0.9 |
| Ceratopogonidae | 09021010 | 0.33 | 0.33 | | -- | 0.1 | 0.1 |
| <i>Ablabesmyia</i> | 09021011001 | 0.33 | 3.33 | 8 | PR | 0.1 | 0.9 |
| <i>Ablabesmyia mallochi</i> | 09021011001004 | 3.00 | | | -- | 0.8 | |
| <i>Nilotanytus</i> | 09021011012 | | 1.00 | 6 | PR | | 0.3 |
| <i>Nilotanytus fimbriatus</i> | 09021011012027 | 1.00 | | | -- | 0.3 | |
| <i>Thienemannimyia</i> | 09021011020 | | 12.00 | 3 | PR | | 3.1 |
| <i>Thienemannimyia group</i> | 09021011020041 | 12.00 | | | -- | 3.1 | |
| <i>Trissopelopia</i> | 09021011021 | 1.00 | 1.00 | | PR | 0.3 | 0.3 |
| <i>Zavrelimyia</i> | 09021011022 | 1.67 | 1.67 | 8 | PR | 0.4 | 0.4 |
| <i>Brillia</i> | 09021011033 | 0.33 | 0.33 | 5 | SH | 0.1 | 0.1 |
| <i>Corynoneura</i> | 09021011036 | 0.67 | 0.67 | 7 | CG | 0.2 | 0.2 |
| <i>Cricotopus</i> | 09021011037 | 0.67 | 9.33 | 7 | SH | 0.2 | 2.4 |
| <i>Cricotopus bicinctus</i> | 09021011037057 | 8.67 | | | -- | 2.2 | |
| <i>Nanocladius</i> | 09021011049 | 1.67 | 1.67 | 3 | CG | 0.4 | 0.4 |
| <i>Orthocladius</i> | 09021011050 | | 1.00 | 6 | CG | | 0.3 |
| <i>Orthocladius lignicola</i> | 09021011050100 | 1.00 | | | -- | 0.3 | |
| <i>Parametriocnemus</i> | 09021011053 | 0.33 | 0.33 | 5 | CG | 0.1 | 0.1 |
| <i>Rheocricotopus</i> | 09021011057 | 0.33 | 0.33 | 6 | CG | 0.1 | 0.1 |
| <i>Tvetenia</i> | 09021011065 | | 0.33 | 5 | CG | | 0.1 |
| <i>Tvetenia bavarica group</i> | 09021011065111 | 0.33 | | | -- | 0.1 | |
| <i>Paratanytarsus</i> | 09021011071 | 2.67 | 3.00 | 6 | -- | 0.7 | 0.8 |
| <i>Paratanytarsus longistylus</i> | 09021011071126 | 0.33 | | 6 | -- | 0.1 | |
| <i>Rheotanytarsus</i> | 09021011072 | | 27.33 | 6 | CF | | 7.1 |
| <i>Rheotanytarsus exiguus group</i> | 09021011072127 | 27.33 | | | CF | 7.1 | |
| <i>Stempellina</i> | 09021011073 | 3.00 | 3.00 | 2 | CG | 0.8 | 0.8 |
| <i>Stempellinella</i> | 09021011074 | 0.33 | 0.33 | 2 | -- | 0.1 | 0.1 |
| <i>Tanytarsus</i> | 09021011076 | 21.67 | 21.67 | 6 | CF | 5.6 | 5.6 |
| <i>Pseudochironomus</i> | 09021011078 | 0.67 | 0.67 | 5 | CG | 0.2 | 0.2 |
| <i>Lauterborniella</i> | 09021011092 | | 6.33 | | CG | | 1.6 |



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| Taxon | Maine Taxonomic Code | Count (Mean of Samplers) | | Hilsenhoff Biotic Index | Functional Feeding Group | Relative Abundance % | |
|---------------------------------------|----------------------|-----------------------------|----------|-------------------------|--------------------------|----------------------|----------|
| | | Actual | Adjusted | | | Actual | Adjusted |
| <i>Lauterborniella agrayloides</i> | 09021011092001 | 6.33 | | | -- | 1.6 | |
| <i>Microtendipes</i> | 09021011094 | | 45.33 | 6 | CF | | 11.7 |
| <i>Microtendipes pedellus group</i> | 09021011094166 | 10.67 | | | -- | 2.8 | |
| <i>Microtendipes rydalensis group</i> | 09021011094168 | 34.67 | | | -- | 8.9 | |
| <i>Nilothauma</i> | 09021011095 | 0.33 | 0.33 | 2 | -- | 0.1 | 0.1 |
| <i>Phaenopsectra</i> | 09021011101 | 0.67 | 0.67 | 7 | SC | 0.2 | 0.2 |
| <i>Polypedilum</i> | 09021011102 | | 3.33 | 6 | SH | | 0.9 |
| <i>Polypedilum aviceps</i> | 09021011102181 | 2.67 | | | -- | 0.7 | |
| <i>Polypedilum scalaenum group</i> | 09021011102189 | 0.67 | | | -- | 0.2 | |
| <i>Stenochironomus</i> | 09021011105 | 1.00 | 1.00 | 5 | CG | 0.3 | 0.3 |
| <i>Tribelos</i> | 09021011107 | | 0.67 | 5 | CG | | 0.2 |
| <i>Tribelos jucundus</i> | 09021011107198 | 0.67 | | | -- | 0.2 | |
| <i>Hemerodromia</i> | 09021016057 | 2.33 | 2.33 | 3 | PR | 0.6 | 0.6 |
| <i>Neoplasta</i> | 09021016064 | 0.33 | 0.33 | | PR | 0.1 | 0.1 |
| <i>Psephenus</i> | 09021108058 | | 2.67 | 4 | SC | | 0.7 |
| <i>Psephenus herricki</i> | 09021108058028 | 2.67 | | | -- | 0.7 | |
| <i>Anchytarsus</i> | 09021110060 | | 0.33 | | -- | | 0.1 |
| <i>Anchytarsus bicolor</i> | 09021110060030 | 0.33 | | | SH | 0.1 | |
| <i>Dubiraphia</i> | 09021113064 | 25.67 | 25.67 | 6 | -- | 6.6 | 6.6 |
| <i>Macronychus</i> | 09021113065 | | 2.33 | 4 | -- | | 0.6 |
| <i>Macronychus glabratus</i> | 09021113065040 | 2.33 | | | -- | 0.6 | |
| <i>Optioservus</i> | 09021113067 | 0.33 | 0.33 | 3 | SC | 0.1 | 0.1 |
| <i>Stenelmis</i> | 09021113070 | 0.33 | 0.33 | 5 | SC | 0.1 | 0.1 |
| Acariformes | 090301 | 0.33 | 0.33 | | -- | 0.1 | 0.1 |
| <i>Ferrissia</i> | 10010204035 | 2.33 | 2.33 | | SC | 0.6 | 0.6 |
| Sphaeriidae | 10020201 | 2.67 | 2.67 | | CF | 0.7 | 0.7 |