

Tolerance Values
(Lower is better!)

Stream Macroinvertebrate Health Scoresheet

(Tolerance Values (TV) derived from Maryland DNR IBI Calculator unless noted by * which indicates State of Pennsylvania TV)

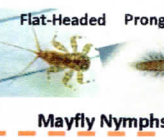
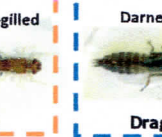




1 point for each Macro family circled

July 17, 2021
Little Falls Branch
Below Mass Ave.



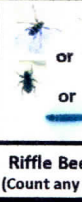
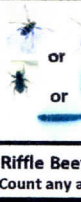





0  Ameletid Mayfly Nymph  Rotted Wing Stonefly Nymph (Spring-Fall)





1  Hellgrammite Larva  Free-living Caddisfly Larva  Humpless Casemaker  Saddlecase (maker) or  Green Stonefly Nymph (Winter-Summer)

2  Brushlegged Mayfly Nymphs  Spiny Crawler  Giant (All Year) Stonefly Nymphs  Common (All Year) Stonefly Nymphs  Periodid (Spring-Fall) Stonefly Nymphs  Small Winter (Fall-Winter) Stonefly Nymphs  Winter (Fall-Spring) Stonefly Nymphs  Spring (Winter-Spring) Stonefly Nymphs




3  Flat-Headed Mayfly Nymphs  Prong-gilled Mayfly Nymphs  Darter Dragonfly Nymphs  Green-eyed Skimmer Dragonfly Nymphs  Fingernet Caddisfly Larva  Uenoid Casemaker Caddisfly Larva Total TOLERANCE SCORE

4  Crane Fly Larva  Whirligig Beetle or  Water Penny  Armored Mayfly Nymph  Little Stout Crawler Mayfly Nymph  Dixid Midge Larva or  Longhorned Casemaker Caddisfly Larvae  Northern Caddisfly Larvae

5  Water Scavenger Beetle or  Crawling Water Beetle  Predaceous Diving Beetle*  Riffle Beetle (Count any as 1) or  Long-Toed Water Beetle  Common Net Spinner  Giant Casemaker Caddisfly Larvae  Broad-winged Damselfly Nymph  Clubtail Dragonfly Nymph 2

6  Asian Clam  Scud  Planaria  Short-legged Water Strider  Trumpetnet Caddisfly Larva 1

7  Black Fly Larva  Cylindrical Jawless Leech  Crayfish  Midge Fly Larva or  Small Squaregills Mayfly 3

8  Narrow Winged Damselfly Larva  Sowbug  Flat Freshwater Jawless Leech 1

9  Common Water Strider*  Lunged Snail 1

10  Aquatic Worm 1

Pollution Sensitive

9 diversity
0 tolerance

- SCORING INSTRUCTIONS:**
- 1) Circle Macros observed
 - 2) Total Macros into boxes (&)
 - 3) Put total of all boxes in DIVERSITY SCORE box
 - 4) Mark corresponding X on DIVERSITY SCORE scale
 - 5) Total all Macros
 - 6) Mark corresponding X on TOLERANCE SCORE scale

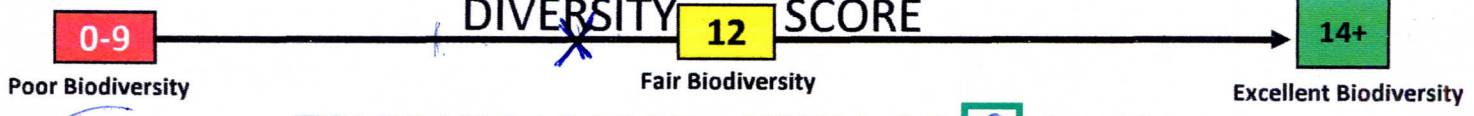
Somewhat Pollution Tolerant

Pollution Tolerant

Total for DIVERSITY SCORE → 9

TOP of Poor!

DIVERSITY SCORE



TOLERANCE SCORE = TOTAL OF 0 BOXES



7/17/21
Little Falls
#45

AUDUBON NATURALIST SOCIETY
TAXONOMIC LISTING OF BENTHOS
Classification of Important Freshwater Benthic Macroinvertebrates in Maryland/DC
February 15, 2020

PHYLUM/ Class/Order/Suborder	FAMILY	COMMON NAME	TOTAL
ANNELIDA			
<i>Hirudinea</i>	Erpobdellidae	Leeches (cylindrical)	3
	Glossiphoniidae	Leeches (flat, wide at end)	
<i>Oligochaeta</i>	Lumbriculidae	Aquatic worms	5
PLATYHELMINTHES	Dugesiidae	Planarians, flatworms	11
MOLLUSCA			
<i>Bivalvia</i>	Corbiculidae	Asian clams	
	Sphaeriidae	Fingernail clams	
	Unionidae	Freshwater mussels	
<i>Gastropoda</i>	Ancylidae	Limpets (low, flat cones)	
	Lymnaeidae	River/pond snails (right)	
	Physidae	Pouch snails (left opening)	
	Planorbidae	Wheel or orb snails	
<i>Send in to verify</i>		Operculate snails	
ARTHROPODA			
<i>Malacostraca</i>			
Amphipoda	Gammaridae	Scuds	
Isopoda	Asellidae	Aquatic sowbugs	19
Decapoda	Cambaridae	Crayfish	
<i>Insecta</i>			
Coleoptera		Aquatic Beetles	
	Dryopidae	Long-toed water beetles	
	Dytiscidae	Predaceous diving beetles	
	Elmidae	Riffle beetles: Genus not identified Genus <i>Ancronyx</i> Genus <i>Macronychus</i> Genus <i>Stenelmis</i>	
	Gyrinidae	Whirligig beetles	
	Haliplidae	Crawling water beetles	
	Hydrophilidae	Water scavenger beetles	
	Psephenidae	Water pennies	
	Ptilodactylidae	Ptilodactylid beetles	

PHYLUM/ Class/Order/Suborder	FAMILY	COMMON NAME	TOTAL
Diptera			
<i>Send in to verify</i>	Athericidae	Watersnipe flies	
<i>Send in to verify</i>	Ceratopogonidae	Biting midges	
	Chironomidae	Midges	3
	Culicidae	Mosquitoes	
<i>Send in to verify</i>	Dixidae	Dixid midges	
<i>Send in to verify</i>	Empiidae	Aquatic dance flies	
	Simuliidae	Black flies	17
	Tabanidae	Horse/deer flies	
	Tipulidae	Crane flies: Genus not identified Genus <i>Antocha</i> Genus <i>Dicranota</i> Genus <i>Hexatoma</i> Genus <i>Tipula</i>	
Trichoptera			
	Brachycentridae	Humpless case maker CF	
	Glossosomatidae	Saddlecase maker CF	
	Hydropsychidae	Common netspinner CF	48
	Hydroptilidae	Micro Caddisflies	
	Lepidostomatidae	Lepidostomatid Case Makers	
	Leptoceridae	Longhorned case maker CF	
	Limnephilidae	Northern case maker CF	
<i>Send in to verify</i>	Molannidae	Hoodcase maker CF	
<i>Send in to verify</i>	Odontoceridae	Strongcase maker CF	
	Philopotamidae	Fingernet caddisflies	
	Phryganeidae	Giant case maker CF	
	Polycentropodidae	Trumpetnet caddisflies	
	Psychomyiidae	Tubemaker caddisflies	
<i>Send in to verify</i>	Rhyacophilidae	Freeliving caddisflies	
	Uenoidae	Uenoid case maker CF	

PHYLUM/ Class/Order/Suborder	FAMILY	COMMON NAME	TOTAL
Ephemeroptera		Mayflies	
	Ameletidae	Ameletid minnow mayflies	
	Baetidae	Small minnow mayflies: Genus not identified	
		Genus <i>Acentrella</i>	
		Genus <i>Baetis</i>	7
<i>Send in to verify</i>	Baetiscidae	Armored mayflies	
	Caenidae	Small squaregill mayflies	
	Ephemerellidae	Spiny crawler mayflies: Genus not identified	
		Genus <i>Drunella</i>	
		Genus <i>Ephemerella</i>	
		Genus <i>Eurylophella</i>	
		Genus <i>Serratella</i>	
	Ephemeridae	Common burrower mayfly	
	Heptageniidae	Flatheaded mayflies: Genus not identified	
<i>Send in to verify</i>		Genus <i>Epeorus</i>	
		Genus <i>Maccaffertium</i>	
<i>Send in to verify</i>		Genus <i>Stenacron</i>	
	Isonychiidae	Brushlegged mayflies	
	Leptohiphidae	Little stout crawler mayflies	
	Leptophlebiidae	Pronggilled mayflies: Genus not identified	
		Genus <i>Leptophlebia</i>	
		Genus <i>Paraleptophlebia</i>	
<i>Send in to verify</i>	Siphonuridae	Primitive minnow mayfly	
Odonata		Dragonflies & Damselflies	
Anisoptera		Dragonflies	
	Aeshnidae	Darner dragonflies	
<i>Send in to verify</i>	Cordulegastridae	Biddies/spiketails	
<i>Send in to verify</i>	Corduliidae	Green-eyed skimmers	
	Gomphidae	Clubtail dragonflies	
<i>Send in to verify</i>	Libellulidae	Common skimmers	
Zygoptera		Damselflies	
	Calopterygidae	Broadwinged damselflies	
	Coenagrionidae	Narrowwinged damselfly	

PHYLUM/ Class/Order/Suborder	FAMILY	COMMON NAME	TOTAL
Plecoptera		Stoneflies (SF)	
	Capniidae	Slender winter stoneflies	
<i>Send in to verify</i>	Chloroperlidae	Green stoneflies	
<i>Send in to verify</i>	Leuctridae	Rolledwinged stoneflies	
	Nemouridae	Nemourid/spring stoneflies	
<i>Send in to verify</i>	Peltoperlidae	Roachlike stoneflies	
	Perlidae	Common stoneflies	
	Perlodidae	Perlodid stoneflies	
<i>Send in to verify</i>	Pteronarcyidae	Giant stoneflies	
	Taeniopterygidae	Taen. broadback/winter SF: Genus not identified	
		Genus <i>Strophopteryx</i>	
		Genus <i>Taeniopteryx</i>	
Megaloptera		"Large Wings"	
	Corydalidae	Dobsonflies/fishflies: Subfamily not identified	
	Nigronia	Fishflies (no brushy gills)	
	Corydalus	Dobsonflies (brushy gills)	
	Sialidae	Alderflies	
Hemiptera		True Bugs	
	Belostomatidae	Giant water bugs	
	Veliidae	Short-legged striders	
Lepidoptera		Aquatic Moths	
	Pyralidae	Aquatic pyralid moths	
Other:			

Unable to identify something you collected or found something interesting?

If you cannot identify an individual(s), need verification of the order, family, or genus, or have something to share with the Macro ID classes:

- Place it in a vial of alcohol and write the date and team number on the vial's label
- On this form give
 - (1) Your reason for submitting the fixed specimen;
 - (2) Whether or not you included it in the counts on this form; and
 - (3) Where you included it.
- Return the vial to ANS along with the data collection sheets.