State of Wisconsin
Department of Natural Resources
PO Box 7291, Madison WI 53707-7291
dnr.wi.gov

Wadeable Macroinvertebrate Field Data Report

Form 3200-081 (R 8/14)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	**Waterbody ID Code**	**Sample ID (YYYYMMDD-CY-FD)**
CAVES CREEK	166100	20181002-039-02

Sampling Location	**Database Key**
	168360350

SWIMS Station ID	**SWIMS Station Name**
10017030	CAVES CREEK AT 5TH AVE (DS OF CULVERT)

Latitude	**Longitude**	**Lat/Long Determination Method (circle)**	**Datum Used if using GPS**
43.92932	-89.522606	SWIMS SWDV GPS	WGS84 or NAD83

Basin (WMU)	**Watershed Name**	**County**
UPPER FOX	MONTELLO RIVER	MARQUETTE

Sample and Site Descriptors

Sample Collector (Last Name, First)	**Project Name**
DAVID BOLHA	NER LONG-TERM TREND WADEABLE REFERENCE STREAM

Sampling Device

- [X] D-Frame Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Other
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	**Estimated Area Sampled (m^2)**	**Number of Samples in Composite**	**Replicate No.** ____ **of** ____
2	1.0	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [ ] Impact / Treatment Site
- [ ] Control Site
- [X] Trend
- [ ] Other: _____

Water Temp. (C)	**D.O. (mg/l)**	**D.O. (% sat.)**	**pH (su)**	**Conductivity (umhos/cm)**	**Transparency (cm)**
11.6	9.4	88.2	7.7	307.6	120

Water Color

- [X] Clear
- [ ] Turbid
- [ ] Stained

Estimated Stream Velocity (m/s)

- [ ] Slow (< 0.15 m/s)
- [X] Moderate (0.15 m/s - 0.5 m/s)
- [ ] Fast (> 0.5 m/s)

Measured Velocity circle units m/s **or** f/s	**Average Stream Depth of reach (m)**	**Average Stream Width of reach (m)**
	0.15	2.0

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 40 Gravel (ladybug to tennisball): 50

Sand: 10 Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____

Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (_____): _____

Embeddedness of Substrate at Sample Site (%) 10 **Canopy Cover at Sample Site (%)** 100

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Stream and Watershed Descriptors

N = Not a problem
U = Uncertain
PL = Present, Low Impact
PH = Present, High Impact

Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological		
Algae: - Diatoms / Periphyton	N	N
- Filamentous Algae	N	N
- Planktonic Algae	N	N
Iron Bacteria	N	N
Macrophytes	N	N
Slimes	N	N
Other - Specify:		
Physical		
Bank Erosion	N	N
Channelization: - Upstream	N	N
- Downstream	N	N
Hydraulic Scour / Channel Incision	N	N
Impoundment: - Upstream	N	N
- Downstream	N	N
Low Flow	N	N
Sedimentation	PL	PL
Sludge	N	N
Thermal	N	N
Turbidity	N	N
Other - Specify:		

Factors that may be influencing Water Resource Integrity	Local	Water-shed
Chemical		
Chlorine	N	N
Dissolved Oxygen	N	N
Nutrients (P, N...)	N	N
Toxics: - Inorganic (Metals)	N	N
- Organic (PCBs, pesticides...)	N	N
Other - Specify:		
Sources of Stream Impacts		
Bank Erosion	N	N
Point Source - Specify:	N	N
Pasturing of Livestock	N	N
Runoff: - Barnyard	N	N
- Construction	N	N
- Cropland	N	PL
- Urban	N	N
Septic Systems	N	N
Tile Drainage - Organic Soils	N	N
- Mineral Soils	N	N
Springs	N	PL
Tributary(s)	PL	PL
Wetland	PL	PL
Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Kiersten Czarnecki	Dimick, Jeffrey	7
Date Processed	Specimens Saved	
10/10/2019	312 Subsample archived in ABL until Jan 2022	

2E: 281 + 31 QC specs 312

Wisconsin Department of Natural Resources
ABL SampleNum: **20181002-39-02**
Taxonomist: Dimick, Jeffrey

Waterbody: **Caves Creek**
SWIMS Database Key: **168360350**

	Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
	Baetis brunneicolor	L	X-	15	Klub 2016		
	B. flavistriga species complex	L	#11	2	"		
1/1	Maccaffertium vicarium	L	I	1	"		
	Trichoptera (Intergripha)	L	II	2	Wils 1995	imm	N
2/26	Brachycentrus americanus	L	0-	25	Wils 1985		
3/29	B. occidentalis	L	III	3	"		
4/32	Glossosoma	L	III	3	Wils 1995	imm	
5/34	Protoptila	L	II	2	"		
	Helicopsyche borealis	L	X-II	17	"		
5/35	Glossosoma intermedium	L	I	1	WymMor 2000		
	Hydropsychidae	L	I	1	Wils 1995	imm	N
	Cheumatopsyche	L	0 III	24	"		
	Hydropsyche	L	XII	12	"	imm	N
	H. betteni	L	X-I	16	Schm Wils 1986		
	Ceratopsyche slossonae	L	IIII	4	"		
6/36	C. sparna	L	I	1	"		
7/37	Lepidostoma	L	I	1	Wils 1995		
	Chimarra	L	II	2	"	imm	
8/38	Nigronia serricornis	L	I	1	Neunzig 1966		
	Macronychus glabratus	L	I	1	Wils Schm 1992		
	Optioservus	L	8#-	85	"	imm	N
	O. fastidiosus 2, 21 A, 1	L,A	0 II	22	"		
	Stenelmis	L	-	5	"		
	Bezzia/Palpomyia	L	I	1	Wils 1995		
	Simulium jenningsi species complex	L	#10 I	1	Adl et al 2004		
	S. vittatum species complex 08110218	L	I	1	"		
	Antocha	L	III	3	Wils 1995		
	Tvetenia	P	I	1	Ferr et al 2008		N
	Gammarus pseudolimnaeus	A	X-I	16	Wils 1972		
	Caecidotea	A	I	1	Will 1972	imm	
	Lebertia	A	I	1	Pluch 1984		
	Limnesia	A	I	1	"		
	Sperchonopsis	A	I	1	"		
	Dugesiidae	A	II	2	ThorpRog 2016		
	Naidinae	A	I	1	Brin Cole 1991		
	Pisidium	A	II	2	Mackie 2007		
	~~Split As Chironomidae~~	~~L~~	~~JJD~~				

>3 taxa, TVAL ≤ 2.0

41 ~~38~~ > (0.1 x 202)
JJD

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Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Cladotanytarsus	L	𝍸	20	Epler et al 2013		
Eukiefferiella claripennis group	L	I	1	And+3 2013		
9/41 Parachaetocladius	L	III	3	"		
Parakiefferiella	L	I	1	"		
Tvetenia bavarica group	L	IIII	4	Bode 1983		
Rheotanytarsus	L	II	2	Epler et al 2013		