

Headwater IBI Calculation

River Code: 13-101 River Mile 0.6 Date: 6-4-09
 River: Baldwin Creek E.B. R.R. Location: _____
 Drainage Area (sq mi): 9.76 Collectors: M. Durbator, C. Welden, J. Roth, M. Lyons, J. Bartley

IBI Metric	Value	Score	Low-End
Number of Native Species	7	3	N/A
Number of Minnow Species	4	3	N/A
Number of Headwater Species	0	1	N/A
Number of Sensitive Species	1	1	N/A
Number of Darter & Sculpin Species	0	1	N/A
Number of Simple Lithophilic Species	0	1	N/A
Proportion as Tolerant	78.24%	1	N/A
Porportion as Omnivores	32.87%	1	N/A
Proportion as Pioneering Species	56.94%	1	N/A
Proportion as Insectivores	3.02%	1	N/A
Proportion with DELT Anomalies	0.93%	3	N/A
Relative Number minus Tolerants	231.3	3	N/A

Total IBI Score (Unadjusted): 20.0

Total IBI Score (Low-End Adjusted): N/A

Fish Data Summary Baldwin Creek RM 0.6

Date: 5 June 2009

Dist. Fished: 0.122 km

<u>Common name</u>	<u>Species code</u>	<u>Feed Guild</u>	<u>Tolerance</u>	<u>IBI Group</u>	<u>Breed Guild</u>	<u>Number of Fish</u>	<u>Relative Number</u>	<u>% by Number</u>
White Sucker	40-016	O	T	W	S	92	226.38	21.30
Creek Chub	43-013	G	T	N	N	191	469.98	44.21
Sand Shiner	43-034	I	M	N	M	4	9.84	0.93
Bluntnose Minnow	43-043	O	T	N	C	50	123.03	11.57
Central Stoneroller	43-044	H		N	N	86	211.61	19.91
Green Sunfish	77-008	I	T	S	C	5	12.30	1.16
Bluegill Sunfish	77-009	I	P	S	C	4	9.84	0.93
					Total:	432	1062.992126	
					Number Species:	7		
					Number Hybrids:	0		



FISH DATA SHEET

Sheet ID For Office Use Only

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New Station (requires lat/long & county)

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Mix Zone

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Page of

Station ID _____ River Code 13-101 RM 0.5 Date 6/4/09 Time _____

Stream Baldwin Creek Location Along back edge of Ore Lake

Comments _____

Lat 41.36103 Long 81.84888 County Cuyahoga ALP _____ Time Fished 10:00

Crew J. Borley, J. Roth Netter M. Dymkalec Others D. Weiden Sampler Type Long-Knee

Distance 400 ft Flow _____ Temp. C _____ Secchi _____ Source _____ Project _____

Fins Code Number Weighed Total Counted Total Weight

Weights (Counts)

DELTA ANOMALIES Deformities, Erosions, Lesions, Tumors Multiple DELTs on one fish

Fins Code	Number Weighed	Total Counted	Total Weight	Weights (Counts)	DELTA ANOMALIES
1 40-016 White Sucker		92			D E L T M *
V	10x				1 2
2 43-013 Creek Chub		191			D E L T M *
V	10x				
3 43-043 Blacknose Minnow		50			D E L T M *
V	10x				1
4 43-044 Central Stickleback		86			D E L T M *
V	10x				
5 77-008 Green Sunfish		5			D E L T M *
V	10x				
6 77-009 Bluegill		4			D E L T M *
V	10x				
7 43-034 Sand Stiver		4			D E L T M *
V	10x				
8					D E L T M *
V	10x				
9					D E L T M *
V	10x				

30% black spot
20% black spot

* A-anchor worm; B-black spot; C-licees; F-fungus; N-blind; P-parasites; S-emaciated, W-swirled scales Y-popeye; Z-other

Stream & Location: Baldwin Creek

RM: 0006 Date: 6/04/09

Scorers Full Name & Affiliation:

River Code: AB-101-0-10 STORET #:

Lat./ Long.: 41.36103/81.84289

Office verified location

1] **SUBSTRATE** Check ONLY Two substrate TYPE BOXES; estimate % or note every type present

Check ONE (Or 2 & average)

BEST TYPES		POOL RIFFLE		OTHER TYPES		POOL RIFFLE		ORIGIN		QUALITY	
<input checked="" type="checkbox"/> BLDR/SLABS [10]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BOULDER [9]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> COBBLE [8]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> GRAVEL [7]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> SAND [6]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BEDROCK [5]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NUMBER OF BEST TYPES: 4 or more [2] 3 or less [0]

Comments: Sand dominates most stream portion

2] **INSTREAM COVER** Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

AMOUNT

Check ONE (Or 2 & average)

<input checked="" type="checkbox"/> UNDERCUT BANKS [1]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> OVERHANGING VEGETATION [1]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SHALLOWS (IN SLOW WATER) [1]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> ROOTMATS [1]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

3] **CHANNEL MORPHOLOGY** Check ONE in each category (Or 2 & average)

SINUOSITY	DEVELOPMENT	CHANNELIZATION	STABILITY
<input type="checkbox"/> HIGH [4]	<input type="checkbox"/> EXCELLENT [7]	<input type="checkbox"/> NONE [6]	<input checked="" type="checkbox"/> HIGH [3]
<input type="checkbox"/> MODERATE [3]	<input type="checkbox"/> GOOD [5]	<input type="checkbox"/> RECOVERED [4]	<input type="checkbox"/> MODERATE [2]
<input type="checkbox"/> LOW [2]	<input type="checkbox"/> FAIR [3]	<input checked="" type="checkbox"/> RECOVERING [3]	<input type="checkbox"/> LOW [1]
<input checked="" type="checkbox"/> NONE [1]	<input checked="" type="checkbox"/> POOR [1]	<input type="checkbox"/> RECENT OR NO RECOVERY [1]	

Comments:

4] **BANK EROSION AND RIPARIAN ZONE** Check ONE in each category for EACH BANK (Or 2 per bank & average)

EROSION	RIPARIAN WIDTH	FLOOD PLAIN QUALITY
<input checked="" type="checkbox"/> NONE/LITTLE [3]	<input type="checkbox"/> WIDE > 50m [4]	<input type="checkbox"/> FOREST, SWAMP [3]
<input type="checkbox"/> MODERATE [2]	<input type="checkbox"/> MODERATE 10-50m [3]	<input type="checkbox"/> SHRUB OR OLD FIELD [2]
<input type="checkbox"/> HEAVY/SEVERE [1]	<input checked="" type="checkbox"/> NARROW 5-10m [2]	<input checked="" type="checkbox"/> RESIDENTIAL PARK, NEW FIELD [1]
	<input checked="" type="checkbox"/> VERY NARROW < 5m [1]	<input type="checkbox"/> FENCED PASTURE [1]
	<input type="checkbox"/> NONE [0]	<input type="checkbox"/> OPEN PASTURE, ROWCROP [0]

Comments:

5] **POOL / GLIDE AND RIFFLE / RUN QUALITY**

MAXIMUM DEPTH	CHANNEL WIDTH	CURRENT VELOCITY	Recreation Potential
Check ONE (ONLY)	Check ONE (Or 2 & average)	Check ALL that apply	Primary Contact
<input type="checkbox"/> > 1m [6]	<input type="checkbox"/> POOL WIDTH > RIFFLE WIDTH [2]	<input type="checkbox"/> TORRENTIAL [-1]	Secondary Contact
<input type="checkbox"/> 0.7-1m [4]	<input checked="" type="checkbox"/> POOL WIDTH = RIFFLE WIDTH [1]	<input type="checkbox"/> VERY FAST [1]	(circle one and comment on back)
<input type="checkbox"/> 0.4-0.7m [2]	<input type="checkbox"/> POOL WIDTH < RIFFLE WIDTH [0]	<input checked="" type="checkbox"/> FAST [1]	
<input type="checkbox"/> 0.2-0.4m [1]		<input type="checkbox"/> INTERSTITIAL [-1]	
<input type="checkbox"/> < 0.2m [0]		<input checked="" type="checkbox"/> MODERATE [1]	
		<input type="checkbox"/> INTERMITTENT [-2]	
		<input type="checkbox"/> EDDIES [1]	

Comments:

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average).

RIFFLE DEPTH	RUN DEPTH	RIFFLE / RUN SUBSTRATE	RIFFLE / RUN EMBEDDEDNESS
<input checked="" type="checkbox"/> BEST AREAS > 10cm [2]	<input type="checkbox"/> MAXIMUM > 50cm [2]	<input checked="" type="checkbox"/> STABLE (e.g., Cobble, Boulder) [2]	<input type="checkbox"/> NONE [2]
<input type="checkbox"/> BEST AREAS 5-10cm [1]	<input checked="" type="checkbox"/> MAXIMUM < 50cm [1]	<input type="checkbox"/> MOD. STABLE (e.g., Large Gravel) [1]	<input type="checkbox"/> LOW [1]
<input type="checkbox"/> BEST AREAS < 5cm [metric=0]		<input type="checkbox"/> UNSTABLE (e.g., Fine Gravel, Sand) [0]	<input checked="" type="checkbox"/> MODERATE [0]
			<input type="checkbox"/> EXTENSIVE [-1]

Comments:

6] **GRADIENT** (ft/mi) VERY LOW - LOW [2-4] % POOL: 45 % GLIDE: 50 Gradient Maximum 3

DRAINAGE AREA (mi²) MODERATE [6-10] % RUN: 10 % RIFFLE: 45 Gradient Maximum 10

HIGH - VERY HIGH [10-6]