

Biosurvey: Field Data Sheets (p 1 of 3)

Macroinvertebrate Survey

Date: year _____ month _____ day _____ Time: _____ hour _____ minute
(NOTE: Time hr./min. on 24-hour clock, as 10:10 for AM or 22:10 for PM)

Site ID# _____ Creek: _____

Recorder Information

Name _____

Monitor Information

Name _____

Monitor Information

Name _____

Monitor Information

Name _____

Monitor Information

Name _____

Precipitation In the past 24 hours:

- Storm (heavy rain > 1in)
- Rain (steady rain ¼in to 1in)
- Showers (intermittent rain up to ¼in)
- Overcast
- Clear

Current:

- Storm (heavy rain > 1in)
- Rain steady rain ¼in to 1in)
- Showers (intermittent rain up to ¼in)
- Overcast
- Clear

Type of Stream

- Rocky-bottom
- Muddy-bottom

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Macroinvertebrate Count

Identify the macroinvertebrates (to order) in your sample using the identification sheets. We are only concerned with organisms that appear on the identification sheets. Record the number of organisms below and then assign them letter codes based on their abundance:

R (rare) = 1-9; **C** (common) = 10-99; **D** (dominant) = 100 plus organisms.

example: 20 (C) WaterPenny larvae

Group I - Sensitive

_____ (____) Water Penny larvae

_____ (____) Hellgrammites

_____ (____) Mayfly nymphs

_____ (____) Gilled snails

_____ (____) Riffle beetle adults

_____ (____) Stonefly nymphs

_____ (____) Non-net spinning

caddisfly larvae (case-
making & free-living)

Group II - Somewhat Sensitive

_____ (____) Beetle larvae

_____ (____) Clams

_____ (____) Crane fly larvae

_____ (____) Crayfish

_____ (____) Damselfly nymphs

_____ (____) Dragonfly nymphs

_____ (____) Scuds

_____ (____) Sowbugs

_____ (____) Fishfly larvae

_____ (____) Alderfly larvae

_____ (____) Net-spinning
caddisfly larvae

Group III - Tolerant

_____ (____) Aquatic worms

_____ (____) Blackfly larvae

_____ (____) Leeches

_____ (____) Midge larvae

_____ (____) Snails

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Water Quality Rating

To calculate the index value, add the number of **letters** found in the three groups above and multiply by the indicated weighing factor.

Group I – Sensitive

(# of R's) _____ x 5.0 = _____

(# of C's) _____ x 5.6 = _____

(# of D's) _____ x 5.3 = _____

Sum of the Index Value for Group I = _____

Group II – Somewhat Sensitive

(# of R's) _____ x 3.2 = _____

(# of C's) _____ x 3.4 = _____

(# of D's) _____ x 3.0 = _____

Sum of the Index Value for Group II = _____

Group III – Tolerant

(# of R's) _____ x 1.2 = _____

(# of C's) _____ x 1.1 = _____

(# of D's) _____ x 1.0 = _____

Sum of the Index Value for Group III = _____

To calculate the water quality score for the stream site, **add together the index values for each group**. The sum of these values equals the water quality score.

Water Quality Score = _____

Compare this score to the following number ranges to determine the quality of your stream site.

_____ Good > 40 _____ Fair 20-40 _____ Poor <20

- *Note: The tolerance groupings (Group I, II, III) and the water quality rating categories were developed for streams in the Mid-Atlantic states.*

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