

Quiz:

What are the six groups of macroinvertebrates we looked at in class last week?

Which of those groups are classified as Orders and which is a Genus?

Due at 7:47!

Field Trip:

- Thurs. 1/15 - "all day" 8:15 - 2:30
- Check w/ 4th, 6th, 8th teachers
- Bring food & water
- Bring appropriate clothing:
 - boots/shoes ok for mud
 - warm jackets/pants
 - raincoat/rain pants / umbrella
- Permission slips!
TOMORROW (Wed. 1/14)
- Extra credit w/make-up assignment

Aquatic macroinvertebrates are indicators of water quality.

Indicators are things you can measure/
count that give you information about
something else

We can count the different types
of M.I.'s and use that to give us
info about Jackson Creek's water quality

We need to categorize all the organisms

we see:

Mayfly richness = 2
3 huge, with green stripes
4 small, fast, "hairy"

Stone fly richness = 2
2 huge hooky claws
1 gilly legs

Caddis richness = 2
1 stone shell
1 grass shell

True fly
3 red colored ones % = $\frac{3}{26}$
4 other 11.5 %

Beetles
1

Snails
6

dominance %
 $6 + 4 + 4 = 14$
54% $\frac{14}{26}$

Table 12-4. Family level metrics and scoring criteria.

Metric	Raw Value	Scoring Criteria			Score (Circle)
		5	3	1	
Taxa Richness	10	>18	10-18	<10	5 3 1
Mayfly Richness	2	>4	2-4	<2	5 3 1
Stonefly Richness	2	>3	1-3	0	5 3 1
Caddisfly Richness	2	>4	2-4	<2	5 3 1
% Chironomidae	11.5	<15	15-30	>30	5 3 1
% Dominance	54	<30	30-50	>50	5 3 1
(Top 3 Taxa)					18

Score Range

Stream Condition

>23

No impairment: passes Level 2 assessment. Indicates good diversity of invertebrates and stream conditions with little disturbance. Further sampling will help confirm the site's condition as unimpaired.

18

17-23

Moderate Impairment: evidence of some impairment exists. Requires further study and more detailed analysis.

<17

Severe Impairment: fails Level 2 assessment. Evidence of stream disturbance exists. Further study may be warranted to confirm level of impairment and potential causes.

This analysis tells us only
if the water quality is suitable
for trout, salmon, and other similar
organisms!