

Friends of the Chicago River

ADOPT A RIVER SCHOOL

WATER CHEMISTRY DATA SHEET

School Name:

Site Location:

Date:

Time:

Test	Expected Range	Equipment	Test Value	Q Value	Weighting Factor	Total
pH	6 - 8.5				0.11	
Phosphate (ppm or mg/l)	0.1 - 2.5 ppm				0.1	
Nitrate (ppm or mg/l)	0.2 - 8.0 ppm				0.1	
Dissolved Oxygen (conc. ppm or mg/l) (percent sat. %)	1 - 12 ppm		Concentration: % Saturation:		0.17	
Bio-Oxygen Demand (ppm or mg/l)	0.05 - 19 ppm				0.11	
Temperature (°C)	$\Delta < 3$ °C		Site 1: Site 2: Δ :		0.1	
Turbidity (cm)	2 - 140 cm				0.08	
Total Solids (mg/l)	200 - 2800 mg/l				0.07	
Fecal Coliform (E.coli colonies/100 ml)	50 - 100,000 colonies/100ml				0.16	

Overall Water Quality Score

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MACROINVERTEBRATE DATA SHEET

School Name:

Site Location:

Date:

Time:

	GROUP 1: Intolerant to pollution	GROUP 2: Moderately intolerant to pollution	GROUP 3: Fairly tolerant to pollution	GROUP 4: Very tolerant to pollution
Macroinvertebrates (check all the ones you found)	<input type="checkbox"/> Alderfly <input type="checkbox"/> Dobsonfly <input type="checkbox"/> Snipe Fly <input type="checkbox"/> Stonefly	<input type="checkbox"/> Caddisfly <input type="checkbox"/> Clam/Mussel <input type="checkbox"/> Cranefly <input type="checkbox"/> Crayfish <input type="checkbox"/> Damselfly <input type="checkbox"/> Dragonfly <input type="checkbox"/> Mayfly <input type="checkbox"/> Riffle Beetles <input type="checkbox"/> Water Penny	<input type="checkbox"/> Black Fly <input type="checkbox"/> Midge <input type="checkbox"/> Right-handed or other snails <input type="checkbox"/> Scud <input type="checkbox"/> Sowbug	<input type="checkbox"/> Aquatic worm <input type="checkbox"/> Blood worm Midge <input type="checkbox"/> Leech <input type="checkbox"/> Left-handed snail
Number of TAXA (add up checks)				
Weighting Factor	x 1	x 2	x 3	x 4
GROUP SCORE (TAXA x weighting factor)	=	=	=	=

TOTAL GROUP SCORE (add up the group scores from all the columns)	
TOTAL NUMBER OF TAXA (add up the number of taxa from all columns)	
WATER QUALITY INDEX (total group score ÷ total number of taxa)	

Water Quality (circle one)	
Excellent	1.0 – 2.0
Good	2.1 – 2.5
Fair	2.6 – 3.5
Poor	greater than 3.6

Group 1 – These organisms are generally considered to be intolerant to pollution



Alderfly Larva



Dobsonfly Larva

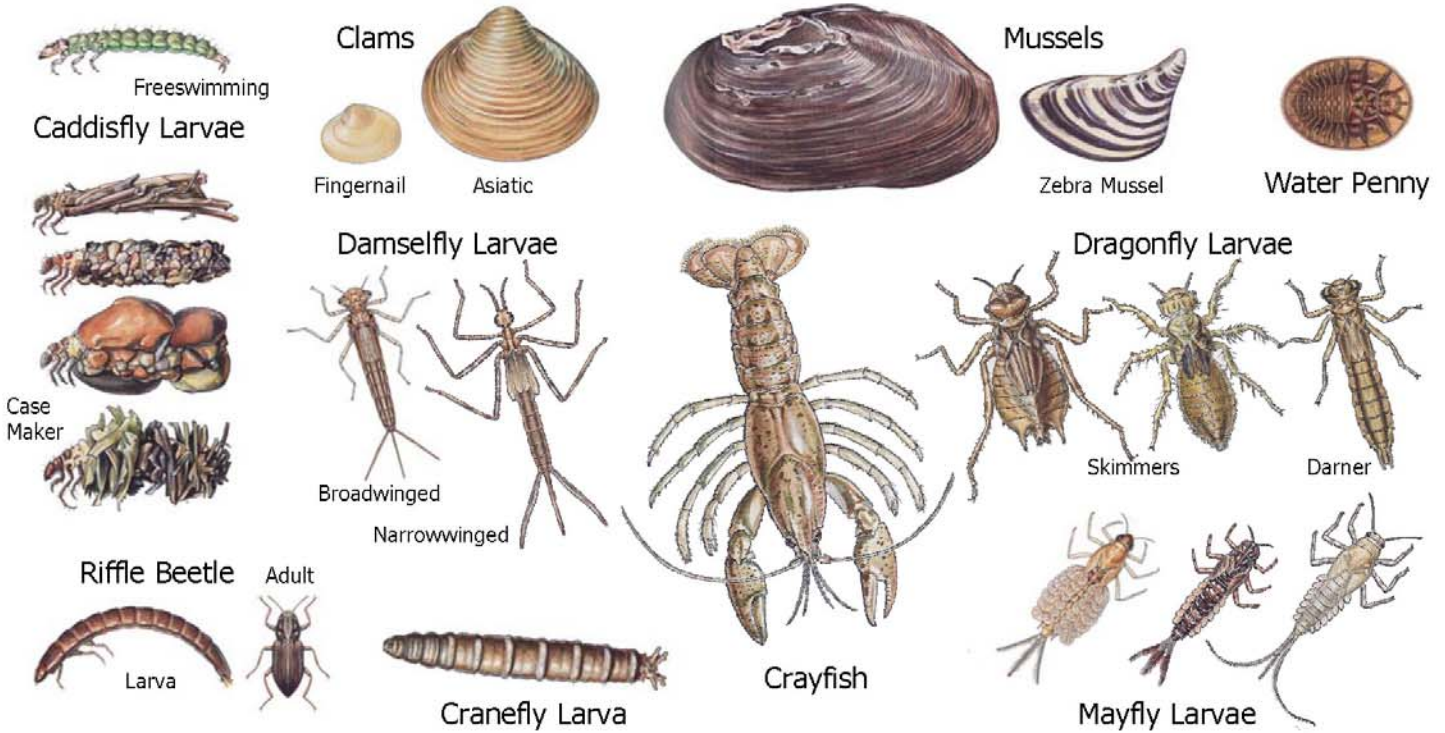


Snipe Fly Larva

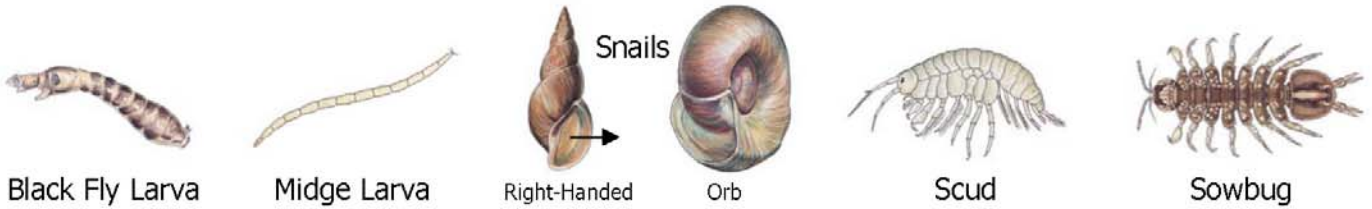


Stonefly Larva

Group 2 – These organisms are generally considered to be moderately intolerant to pollution



Group 3 – These organisms are generally considered to be fairly tolerant to pollution



Group 4 – These organisms are generally considered to be very tolerant to pollution



Other Aquatic Organisms



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HABITAT ASSESSMENT DATA SHEET

School Name:

Site Location:

Date:

Time:

Present Weather:

- | | | |
|--------------------------------------|---|---|
| <input type="checkbox"/> Clear/Sunny | <input type="checkbox"/> Intermittent Showers | <input type="checkbox"/> Heavy Rain or Thunderstorm |
| <input type="checkbox"/> Overcast | <input type="checkbox"/> Steady Rain | |

Weather in past 48 hours:

- | | | |
|--------------------------------------|---|---|
| <input type="checkbox"/> Clear/Sunny | <input type="checkbox"/> Intermittent Showers | <input type="checkbox"/> Heavy Rain or Thunderstorm |
| <input type="checkbox"/> Overcast | <input type="checkbox"/> Steady Rain | |

Water Odor:

- | | | |
|-----------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Fishy | <input type="checkbox"/> Petroleum |
| <input type="checkbox"/> Sewage | <input type="checkbox"/> Rotten Eggs | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Chlorine | | |

Water Color:

- | | | |
|--------------------------------|-------------------------------------|----------------------------------|
| <input type="checkbox"/> Clear | <input type="checkbox"/> Dark Brown | <input type="checkbox"/> Reddish |
| <input type="checkbox"/> Milky | <input type="checkbox"/> Oily Sheen | <input type="checkbox"/> Green |
| <input type="checkbox"/> Foamy | | |

Physical Characteristics:

- | | | | | |
|-----------------------------------|-------------------------------------|----------------------------------|--------------------------------------|--|
| <input type="checkbox"/> Straight | <input type="checkbox"/> Meandering | <input type="checkbox"/> Braided | <input type="checkbox"/> Channelized | <input type="checkbox"/> Pool and riffle |
|-----------------------------------|-------------------------------------|----------------------------------|--------------------------------------|--|

Canopy Cover:

- | | | | | | |
|-----------------------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|
| <input type="checkbox"/> 0% | <input type="checkbox"/> 1-5% | <input type="checkbox"/> 6-25% | <input type="checkbox"/> 26-50% | <input type="checkbox"/> 51-75% | <input type="checkbox"/> 76-100% |
|-----------------------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|

Available Stream Habitat:

Check all that are present:

- Pools and riffles
 Wetland
 Rocks
 Log piles
 Weed beds
 Undercut banks
 Human made objects (pilings, concrete blocks, etc.)

Bank and Riparian Vegetation:

If more than one present, please record estimated percents:

- Barren _____ %
 Grasses _____ %
 Brush _____ %
 Deciduous trees _____ %
 Conifers _____ %
 Other _____ %

Bank Erosion:

Estimate percent bare soil: _____ %

Bank slope: Steep Moderate Slight

Bank stability: Stable Slightly eroded Moderately eroded Severely eroded

Human Use:

Please check off all that apply:

- Biking
 Fishing
 Partying
 Hiking or nature walking
 Canoeing
 Restoration site

Watershed:

Record a "D" next to dominant land uses and an "X" next to those land uses that are minor.

<input type="checkbox"/>	Forest	<input type="checkbox"/>	Park	<input type="checkbox"/>	Scattered residential	<input type="checkbox"/>	Sewage treatment
<input type="checkbox"/>	Prairie or ungrazed fields	<input type="checkbox"/>	Golf course	<input type="checkbox"/>	Moderate density residential	<input type="checkbox"/>	Sanitary landfill
<input type="checkbox"/>	Wetland	<input type="checkbox"/>	Cropland	<input type="checkbox"/>	High density residential		
		<input type="checkbox"/>	Livestock pasture	<input type="checkbox"/>	Commercial		
				<input type="checkbox"/>	Industrial		

Site Map

Draw a 100-foot long section of the river. Make sure to include: compass rose, key (if symbols are used), direction of river flow, location of pools & riffles, roads, bridges & paths, bank vegetation and areas of erosion. Also include information which identifies where you are along the river.

