

# GEORGIA ADOPT-A-STREAM MACROINVERTEBRATE QA/QC TEST



Name:

Trainer's Name:

Workshop Location:

Date:

**A total of 80 points is required for Macroinvertebrate QA/QC Certification.**

1. What are the goals of Georgia Adopt-A-Stream? (5 points)
  
2. How often is macroinvertebrate monitoring conducted? (5 points)
  
3. True/False. Volunteers should submit their data as soon as possible to the online AAS database (5 points)
  
4. What can monitoring with macroinvertebrates tell us? (select all that apply) (5 points)
  - a. Water Quality
  - b. Habitat Quality
  - c. Air Quality
  
5. List two reasons why macroinvertebrates are good water quality indicators. (10 points)
  - a.
  - b.
  
6. Sampling Methods (30 points): Please fill out the below chart for each type of stream, the net used, area sampled (per sample, not total), and how many samples of each habitat type are collected.

STREAM TYPE	METHODS		HABITAT TYPE		
	Type of net used	Area Sampled per net (square feet)	Vegetative Margins	Organic Matter	Substrate
Rocky Bottom					
Muddy bottom					

7. Woody debris/Organic matter includes the following (note\*all are submerged & decomposing) (select all that apply) (5 points):
  - a. Submerged leaf packs
  - b. Submerged trees
  - c. Submerged tree roots
  - d. Submerged branches

8. When calculating the Water Quality Index Score on the AAS Macroinvertebrate Count Form, is abundance or diversity more important? Please explain why. (10 points)
9. On the AAS Macroinvertebrate Key, pollution sensitivity is directly related to levels of: (5 points)
- a) Heavy metals                      b) Dissolved oxygen                      c) Phosphate                      d) Nitrate
10. Recent heavy rains can affect the macroinvertebrate sampling results. TRUE / FALSE (5 points)
11. You would expect to find different Water Quality Index scores throughout the state of Georgia      TRUE / FALSE (5 points)
12. Leaf packs to be included in a sample should be in the water and decomposing. TRUE / FALSE (5 points)

**Identification – over two misidentifications requires retesting for QA/QC Certification.**

- A. \_\_\_\_\_ K. \_\_\_\_\_
- B. \_\_\_\_\_ L. \_\_\_\_\_
- C. \_\_\_\_\_ M. \_\_\_\_\_
- D. \_\_\_\_\_ N. \_\_\_\_\_
- E. \_\_\_\_\_ O. \_\_\_\_\_
- F. \_\_\_\_\_ P. \_\_\_\_\_
- G. \_\_\_\_\_ Q. \_\_\_\_\_
- H. \_\_\_\_\_ R. \_\_\_\_\_
- I. \_\_\_\_\_ S. \_\_\_\_\_
- J. \_\_\_\_\_ T. \_\_\_\_\_

13. If the macroinvertebrates from **LETTERS A-J** were your whole sample, what would be the total index score and water quality rating? (5 points)

SCORE: \_\_\_\_\_  
 RATING: \_\_\_\_\_