

## Malloryville Laboratory Writeup – Due Tuesday, November 28

Answer the questions below on a separate page and word processed (except for #1+2 which you may do in pencil on this sheet). Since this is a take-home, I expect some detailed answers. *I insist that you do all of this work ALONE with no assistance from classmates, other students or faculty. To ensure your honor in this, please sign the honor statement at the end of the page. I trust you take this as seriously as I do. Dr.C.*

1.  $120 \text{ km}^2 =$  \_\_\_\_\_ ha ? (show work and circle answer)

2. Perform the following conversion: (show work and circle answer)

$2.5 \text{ mg/L} =$  \_\_\_\_\_  $\text{g/cm}^3$ ? (1L =  $10^3$ mL, and 1mL =  $1 \text{ cm}^3$ )

3. Define the word “peat” in its broadest sense (on separate page, no more than 3 sentences).

4. Define the word “esker” and discuss how one is formed (on separate page, no more than 3 sentences).

5. Distinguish between a “marsh,” a “swamp,” a “fen” and a “bog.” In your answer discuss the type of vegetation and the hydrologic connections of groundwater with surface water. Also, discuss what approximate comparisons there would be between pH and electrical conductivity as measured at each site (on separate page, no more than ½ page).

6. On the last page of the lab handout on the “Malloryville Wetland Complex,” there is a diagram of a “sediment core” taken in the bog, or the last stop on our tour. Fully discuss the likely history of this bog from its beginnings just after the Wisconsin glaciation receded. Be specific with times and types of sediment, and how the proposed model for the development of this bog (from McNamara et al.) is likely. (on separate page, no more than ½ page).

*I have neither received assistance from, nor given assistance to, anyone else on the information contained in this writeup.*

Name (signature) \_\_\_\_\_