

Soil Invertebrate Reading – “Terrestrial Arthropod Assemblages”

Field Biology

These questions accompany the scientific paper entitled “Terrestrial Arthropod Assemblages: Their Use in Conservation Planning” by Kremen et. al. Before answering the questions, skim through the article to familiarize yourself with the content and overall ideas. Then, address the questions by references the specific page and section of the document. (You may need to do some additional research on the internet to answer some of the questions.) Each of your answers should be approximately one paragraph long, with complete sentences. Do NOT cut and paste to generate your answers! Type your answers into a Microsoft Word document and send them as an attachment to dan.bregar@corvallis.k12.or.us with the subject heading “Per X Your Name Invert Reading”. Please work individually to complete this assignment.

1. Page 797, section “Inventory and Monitoring: Definitions”: Explain the difference between a scientific inventory and scientific monitoring. Why might both of these be necessary to evaluate invertebrate populations?
2. Page 797, section “Inventory and Monitoring: Definitions”: In your own words, explain what is meant by the term “Indicator Assemblages”.
3. Page 798, section “Terrestrial Arthropods as Indicators for Inventory and Monitoring”: What are some reasons that terrestrial arthropods might be good indicator species in the Amazonian rain forest?
4. Page 799, section “Inventory Strategies”: Why might relative abundance be useful information to have in an inventory of terrestrial arthropods?
5. Page 800, section “Inventory Strategies”: What is the difference between species richness and species diversity?
6. Page 800, section “Monitoring of Arthropod Indicator Assemblages”: What does it mean to choose an assemblage based on functionality rather than taxonomy?
7. Page 801, section “Monitoring of Arthropod Indicator Assemblages”: What is “habitat fragmentation”? Describe an example that illustrates the sensitivity of terrestrial arthropods to habitat fragmentation.
8. Page 802, section “Monitoring of Arthropod Indicator Assemblages”: Why might terrestrial arthropods be useful as early indicators of environmental change?