
Ecologists often argue that maintaining species diversity is important for the function of ecological systems. Unfortunately, human activity frequently reduces species diversity and our activity can even lead to global extinction. One important ecological function of maintaining the presence and activity of species may be to reduce the incidence of organisms that cause human disease. However, ecologists have just begun to actively study how species diversity interacts with disease agents. This paper is one of the first attempts to experimentally test whether the presence of additional species in a community can influence disease risk.

The reading is available on the class website (http://ww2.coastal.edu/jjhutche/bio370.htm). After reading the paper, please answer the following questions. Some rules to follow:

- Answers must be typed.
- You do not need to include the questions; just provide the answers.
- If you refer to organisms using their scientific name, you must italicize the genus and species names (e.g., *Homo sapiens*, not Homo sapiens).
- Points also will be taken away for errors in spelling and grammar, so proofread!
- When writing your answers, USE YOUR OWN WORDS. For example, do not just copy the figure captions to interpret the graphs or slightly change the order of wording found in the text.

This assignment is due Monday, 18 June 2018; turn in a printed copy.

Questions:

1) What questions or hypotheses are the authors addressing with each graph shown in Figure 1? What conclusions do the authors draw from these data for each of these treatments? Do you agree that the data support these conclusions? Explain why. In your answer, explain how these graphs go together to tell a complete story.

2) What questions or hypotheses are the authors addressing with the graph shown in Figure 2? What conclusions do the authors draw from these data for each of these treatments? Do you agree that the data support these conclusions? Explain why.

3) What questions or hypotheses are the authors addressing with the graph shown in Figure 3? What conclusions do the authors draw from these data for each of these treatments? Do you agree that the data support these conclusions? Explain why.

4) Explain how species diversity of snails likely influences disease transmission in this study. Use your own words and focus on the main findings.