CONDITIONAL INTERACTIONS

1. "Interaction" is used in at least two important ways in ecology: species interactions in the context of community ecology and statistical interactions in the context of general linear models. Use examples, graphical models, and mathematical models to compare and contrast the interaction concept in these two contexts.

2. Conditional interactions in ecology
   A. In ecology, what is meant by a "conditional interaction"?
      Describe evidence from a diversity of taxa that illustrate or reject the relevance of conditional interactions for (1) population ecology, (2) evolutionary ecology, (3) community ecology, and (4) ecosystem ecology.
   B. Based on the evidence presented in part A, suggest a general unambiguous definition for conditional interaction.
   C. Would you characterize conditional interactions as rare, occasional, common, or ubiquitous? Why? Support your characterization with references to the pertinent literature.
   D. Identify an existing theory or suggest a testable hypothesis that predicts the circumstances under which conditional interactions are versus are not important.
   E. Is there a statistical analog for conditional interactions? Justify your answer.

(total of 4-5 pages)