Ecology 4-19-10 Bio 228 Prof. Kerkhoff

Reading response guide 4 – DISCUSSION Friday, 4-23-10

Reich, P.B., S.E. Hobbie, T. Lee, D.S. Ellsworth, J.B. West, D. Tilman, J.M.H. Knops, S. Naeem, and J. Trost. 2006. Nitrogen limitation constrains sustainability of ecosystem response to CO₂. Nature 440:922-925.

<u>What to think about:</u> Read both the paper and ALL of the supplemental material (just a few more figures and some detail about the experimental methods). Think about, **but don't write about**, how well information from an experimental study like this one will translate to knowledge about how ecosystems will respond to CO2 increase more generally. What are the strengths and limitations? We will discuss this in class.

What to write about: This report can be VERY short, considering everything else you have to work on at this point. Examine figure 1 very closely. Notice that panel b plots the "CO2 effect" on the Y-axis, while panel c plots the "N effect on the CO2 effect." How are the values calculated? What do they mean?

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