Advanced Ecology Questions Dave Jenkins

HSS (1960)

1. Their first pg. “The purpose of this note is to demonstrate a pattern of population control in many communities which derives easily from a series of general, widely accepted observations. The logic used is not easily refuted.” Go for it! Refute away!
2. p. 423. “There thus exists either direct proof or a great preponderance of factual evidence that in terrestrial communities decomposers, producers, and predators, as whole trophic levels, are resource-limited in the classical density-dependent fashion.” Does this statement hold up 60 years on?
3. Do trophic levels hold together as units to be discussed like this?
4. Might an oceanic version of this argument be supported?

Ricklefs (1987)

5. p. 167, right. “Although plant and animal form and function commonly converge in similar environments (13), accumulating counterexamples dispel belief that species diversity similarly converges.” Is species diversity so unpredictable?
6. The balls in a box metaphor – does that work? Is niche fixed (a ball cannot change size), or is it flexible (a ball shrinks or grows)?
7. p. 170, left. “Conceivably, the equilibrium number of species may shift much more rapidly than the community can approach it.” Do equlibria exist? At what temporal and spatial scales?
8. Has community ecology been working at the wrong scales?

Lawton (1999)

9. Do you agree that less complex sciences (e.g., population biology) are necessarily “harder sciences” than more complex sciences (e.g., community ecology)?
10. p. 182, left. “I doubt that we could ever build a useful, practical model of an assemblage of even ten or twenty species (never mind hundreds of species) for management purposes. An alternative view, of course, is that I (and others) simply lack the imagination and courage to try.” Do you think there has been progress in this direction?
11. Do you share his optimism about food webs having rules governing their structure? What about his skepticism about keystone species being a generality?
12. Both Lawton and Ricklefs dealt with local:regional species curves. Do they agree, and do you agree with their views?
13. Do you share his optimism and endorsement of macroecology?