Advanced Ecology Discussion Questions D Jenkins

MacArthur (1958)

1. p. 686. "Animal populations may be regulated by two types of events. The first type occurs (*but need not exert its effect*) independently of the density of the population … The second type of event depends on the density of the population for both its occurrence and its strength."
   a. Do you accept the bit in the ( )?
   b. If so, then what does this imply about detecting density-independent regulators vs. density-dependent regulators?
2. Figures 2-6 are often reproduced in textbooks (lately with color and cartoon birds). Why?
3. How vital are results in those figures vs. Fig. 7 to overall results?
4. p. 695, Table V. What does this suggest about the Darwin's finches story?
5. Which comes first – establishing territory in trees, nest locations in trees, or foraging zones in trees?
6. Why don't birds shift their interactions after migrating to Costa Rica?

Park (1948)

7. Ahhhhhh …. real Experiments! Controls, replicates, incubators. Finally! Some actual Science! Enough of this bird-watching pseudoscience mumbo jumbo!
8. Tables AND Figures – we have pared bulk since 1948. Anything else strike you?
9. Fig.s 3-5. What do you see? What might these predict?
10. Was this about competition or parasitism?

Connell (1961)

11. p. 836, first page, end of 2nd ¶. Is this what MacArthur concluded?
12. Among all the trait differences between *Chthamalus* and *Balanus* that are reported by Connell, which one matters most?
13. Figs. 2 & 3. How do these differ, and what is the point?
14. Table III. Is anyone impressed?
15. So predation is pretty minor here, right? It is all about competition.
16. Fig. 5. Does this work for you?