ADVANCED ECOLOGY DISCUSSION QUESTIONS Dave Jenkins

Holling (1973)

1. What are resilience and stability, and how do you measure them?
2. Fig. 2 - which panel represents alternative stable states? How does this compare to Fig. 4?
3. How much does the idea of alternative stable states owe to Lotka-Volterra type approaches, as summarized by Holling?
4. How well does the 2D of predator-prey interactions translate to global tipping points, planetary boundaries, etc.?
5. Fig. 3 – Someone please explain to me how we get multiple equilibria in Figs. 3D-F.
6. Last paragraph on pg. 15 – Does this argue against thinking about equlibria? And thus against alternative stable states, etc. etc.?
7. How are stability, resilience and persistence related? What about resistance?
8. Is the conclusion at the end contrary to what you would expect from theory?