Advanced Ecology Discussion Questions

Skellam (1951)

- 1. Synopsis. "The random walk problem ..." Is this a dumb null model or is it useful? Someone please Google Scholar the phrase [ecology "random walk"] since 2019.
- 2. Paragraph 1.1 Did he anticipate another discipline here?
- 3. A theme among some of these papers seems to be mathematicians vs. biologists. Is this real?
- 4. How is this work relevant to conservation biology?
- 5. His p. 213, section 4.1. Does anyone know what a cellular automata model does?
- 6. His p. 216. section 4.5. Is anyone familiar with McPeek & Holt (1992)? https://www.journals.uchicago.edu/doi/abs/10.1086/285453
- 7. His p. 216. 5. Biological Discussion, ¶ 1. Does anyone know about connectivity / resistance models of movement?

Huffaker (1958)

- 8. His p. 344. lists 7 questions: What were the answers?
- 9. Hi p. 345. ¶ starting "In the present study …" Does this accurately describe the described work?
- 10. What were the total material costs of this experiment (in 2020 \$US)?
- 11. How confident are you [0-10 scale] that you could repeat this study as described?
- 12. His p. 355 370. Summarize for me the progression of Figures.
- 13. p. 372, top partial ¶. Which took longer the experiment or building the paper?
- 14. p. 372, 1st full ¶: steps were needed to make the system more realistic for the organisms. How many lab experiments get here?
- 15. What future research did this 1958 work anticipate?