

Grinnell (1917)

1. The fount of all modern knowledge (Wikipedia) writes that “Joseph Grinnell was probably the first to use it [niche] in a research program in 1917, in his paper ...” How many times did he use this word he appropriated from architecture?
2. Ten years later, Charles Elton defined it as “The 'niche' of an animal means its place in the biotic environment, its relations to food and enemies.” Who was more correct?
3. Does niche exist beyond organisms, and thus may be vacant in an environment?

Davidson & Andrewartha (1948)

4. Why is Table 1 in here?
5. The authors spend much ink on obtaining and then simplifying regression models to predict y , using partial coefficients for $x_1 - x_6$. Pretty freaking awesome, eh?
6. Was this a precursor to modern-day “academic data piracy”* ?
7. Their p. 220, ¶ at bottom left. If density-independent processes dominate population dynamics, why all the ecological focus on density dependence?

Hutchinson (1957)

8. Hutchinson formalized (i.e., mathematized) niche concepts (with MacArthur’s help). Someone help me here – how does this relate to Grinnell, or even Elton?
9. His p. 418, bottom right and beyond. “A more important objection to the Volterra-Gause principle may be derived from the extreme difficulty of identifying competition as a process actually occurring in nature.” Davidson & Andrewartha (& Birch) (& Pedro) were right! Competition is a mirage! An American stereotypical mythology!
10. His p. 420, ~mid right. “The future of animal ecology rests in a realisation not only that different animals have different autecologies, but also that different major groups tend to have fundamental similarities and differences particularly in their broad temporal relationships.” Is he anticipating here phylogenetically-based analyses of temporal niche?
11. What does a rank-abundance plot indicate?
12. His p. 425, right. He likens the human baby boom and family size to birds. How often have you seen this lumping of human and animal biology?

- * “Academic data piracy” is the act of raiding a data source, followed by impressive statistical swashbuckling in order to publish. Improved understanding of the study system is accidental. Not to be confused with software or data piracy for profit, because academics inexplicably pay to publish. Often accomplished with Rrrrrrrr software.