

Davis

1. Two 5-cm x 11.5 m sediment cores by Deevey & Davis in Sept. 1960 from a raft (not on ice). Then processed in minutiae for aging and quantitative pollen. Anyone else impressed?
2. How did this work transform palynology?
3. When did the novel ecosystem appear?

Hobbs et al. (2009)

4. “Novel ecosystems” is a concept dripping with anthropocentric hubris because it ignores all changes that have already transpired in geological time. *Change my mind.*
5. p. 601, right. “Clearly, the distinction between the two types [hybrid and novel ecosystems] is somewhat arbitrary, and the exact point at which an ecosystem is considered novel cannot necessarily be universally applied.” Is this another case of using categorical thinking based on simplistic terms for actual, natural gradients?
6. Do you think we have sufficient historical data to evaluate “historic range of variability”?
7. Fig. 1 (b) and (c). Which pathways (arrows) do you think are most likely?
8. How will feeding ~11B people in 2100 bend this story?

Loarie et al. (2009)

9. Now we add climate change to the above story. Which is more important to biodiversity – many localish anthropogenic land (& sea) uses, or climate change?
10. Does the equation:
instantaneous horizontal velocity of temperature change = $^{\circ}\text{C yr}^{-1} / ^{\circ}\text{C km}^{-1} = \text{km yr}^{-1}$
make sense to you? What about the Fig. 1 maps?
11. p. 1052 right. “...mountainous biomes require the slowest velocities to keep pace with climate change.” What does this mean, and does this make sense?
12. Do residence times help the story?
13. p. 1054. “We project that large areas of the globe (28.8%) will require velocities faster than the more optimistic plant migration estimates from a landscape before anthropogenic fragmentation.” Thoughts?