Adam Watson

Write –up 3

The authors, Hadley et al. investigate niche conservatism and argue that ecological niches exist above the species level, specifically the genus level. They specifically focus on one class, mammalians of North America and how there populations fluctuated with major changes to the climate during the late Pleistocene and Holocene. The paper shows, at the family and genus levels, that range size itself was almost constant even with range shifts and extinctions at the species level. Further, the authors suggest that there are differences or controls in niche conservatism at the genus and species levels and discuss how “intrinsic life history traits” control higher-level niche conservatism while at the species level environmental controls are responsible for niche conservatism. The underlying goal of the paper was to find if niche conservatism was evident in levels higher than species and to try and determine what is responsible for the “conservation of a niche through long time periods”.

Likes

Overall, the paper was well written, the authors kept the information concise giving what was necessary, keeping the jargon to a minimum, which appeals to a wider range of readers. The intro to the paper said everything, laying out what follows in the paper perfectly. Probably the most interesting part of the paper is how the findings can help to map the future of life on earth and how Hadley et al, investigate how niche conservatism at the genus level and species levels differ. More so, how critical it is that biodiversity of mammals, and all life, at the genus and species level is and how climate change does and will affect the future of mammalian life.

Dislikes

Where the paper falls short is the results section. Here I would have liked to see a better graph or similar, than those given. It would have had a greater impact on interpreting and maintaining the data and order, keeping the species level and genus levels range changes separate and more meaningful.

Charts and figures

There are few figures in this paper, which might have made it easier to keep the numbers straight and easier to digest the information with only the few figures given. The figures and tables help to show ranges of some of the animals studied and understand the subject matter. In short, they provided the necessary information.