E&B Seminar Series





The (not so) elusive footprint of biotic interactions in the fossil record (and today)

Date

22nd Jan (Fri.)

Time

16:00 (UTC+8)

Venue

Zoom



You can also email us to require the Zoom link (check SBS website→NEWS & EVENTS)

Biotic interactions have been recognised as drivers of community assembly for decades, but traditionally they are believed to act on local scales over relatively short timeframes, whereas abiotic variables control communities at broader scales. Recent research has begun to challenge this assumption by demonstrating that feedbacks exist between biotic interactions and abiotic drivers of community assembly. In a recent study, I showed how north American mammals were affected by the extinction of large-bodied species during the late Pleistocene and into the Holocene, a result that supports the notion that biotic interactions influence community assembly at large scales and has implications for the continuing extirpation of large-bodied species today. This work represents a relatively new avenue of research: the study of biotic interactions via computational methods (as opposed to direct evidence of interactions) based on species occurrence, morphological features, and various modelling approaches, which has the potential to bridge the gap between ecology and palaeoecology.

All are welcome!



Dr. Anikó B. Tóth received her PhD from Macquarie University in 2020. Previously, she was a researcher at the US National Museum of Natural history and a member of the Evolution of Terrestrial Ecosystems working group. Her research focuses on the macroecological effects of interspecific interactions on community assembly in the fossil record and today. She uses cooccurrence analysis and modelling to bridge the gap between palaeo and modern ecology and advance understanding of the biogeography of species distributions. She is currently a postdoctoral fellow at the University of New South Wales in Sydney, working ecology on ecosystem conservation initiatives.

