Daniel Peppe, Ph.D.

Associate Professor & Graduate Program Director Department of Geosciences at Baylor University

Waco, TX, US

Daniel Peppe's research focuses on understanding how plant and animal communities respond to changes in climate through Earth history.

Biography

Daniel Peppe is an Associate Professor and the Graduate Program Director of the Department of Geosciences at Baylor University. His research on understanding how plant and animal communities respond to changes in climate through Earth history. Specifically, his research is concentrated on assessing sedimentary systems, climates, and ecosystems over the last seventy million years in North America and eastern Africa and on developing methods for reconstructing paleoclimate and paleoecology. Results from his current and future research address a broad spectrum of questions aimed at understanding the relationship between environmental, biotic, and climatic change that are recorded in terrestrial sedimentary systems. Through Peppe?s research, he aims to answer questions about how ancient terrestrial ecosystems have been influenced by environmental perturbations, such as long and short term climate change events and mass extinctions. Peppe has three major current and future research initiatives focused on answering questions about the evolutionary history and paleoecology of terrestrial ecosystems and the paleoclimatic record of the last 70 million years of Earth history: 1) Studying Paleocene (66 to 55 million years ago) plant communities across North America to understand how terrestrial ecosystems respond to mass extinction and long term climate change. 2) Reconstructing paleoenvironments from the last 25 million years in East Africa to identify the influence of changing environments on the evolution of apes, humans, and their ancestors. 3) Using relationships between the size and shapes of leaves and climate found in modern plants to develop methods for reconstructing ancient climates and environments. He has received several research grants to fund his research and published numerous articles on paleoclimatology, paleobotany, geochronology, ecology, and other related topics. He has been a scientific consultant for paleontology and earth science-focused television programming, movies, and documentaries. He is a regular commentator for radio and online and print media about scientific breakthroughs in paleontology, paleobotany, paleoclimatology, and geology.

Areas of Expertise

Paleobotany, Paleoclimatology, Paleomagnatism, Ecosystems, Paleoecology, Ecology, Geology, Sedimentology, Stratigraphy, Biostratigraphy, Human Evolution, Geochronology, Extinctions

Affiliations

American Geophysical Union, Geological Society of America, International Organization of Paleobotany, Paleontological Society, Society of Vertebrate Paleontology, American Association of Physical Anthropologists

Education

Yale University
Ph.D. Geology and Geophysics

Yale University
M.Phil. Geology and Geophysics

St. Lawrence University
B.S. Geology
