"Climate Driven Dynamics in Southwestern U.S. Desert Ecosystems"

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295 FASB (Sutton Bldg.)
Abstract

Paleoecological research from desert wetlands (ciénegas) in the American Southwest provides valuable information on drivers of vegetation change, and the role of disturbance, like drought and fire, in desert grasslands. Environmental reconstructions from desert wetland sediments also provide information on the resilience of these ecosystems and the climatological controls on their form and function. Analyses of proxy data, including pollen preservation ratios, have shown a distinct correlation between the El Niño Southern Oscillation (ENSO) and prolonged wet-dry cycles. These correlations match well to other known reconstructions of ENSO. Having an additional reliable proxy for ENSO from the American Southwest is valuable for understanding changes in the strength and extent of ENSO over the last several thousand years as well as for untangling the impact of ENSO on the American Deserts from that of the North America Monsoon.

Bio

Dr. Brian Codding's research focuses on the ecology of foraging economies in the past and present. He maintains archaeological and ethnographic research projects in Australia and Western North America focused on understanding the nature of human-environment interactions among hunting and gathering populations. He received his bachelors from Cal Poly, San Luis Obispo, masters and PhD from Stanford University. He is currently an Assistant Professor of Anthropology at the University of Utah.