

DELINEATING FORENSIC PALEOECOLOGY AS A SUB-DISCIPLINE; CSI DIATOMS?

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Forensic science employs the scientific method in its approach to the collection of data that are subsequently presented in a court of law. Paleoecological research frequently uncovers criminal and/or civil violations of environmental laws, i.e. illegal filling in of wetlands or dumping of toxic material. In many cases, these abuses trigger the paleoecological study to determine the impact of humans at a specific site. Paleoecology is not necessarily Forensic Paleoecology. The manner in which the researcher approaches the data, both in terms of the logic process used to interpret data classes and the type of data classes used can vary between studies either destined for the courtroom or those for publication. Researchers, with a law enforcement background, can combine examination of sediment cores with forensic investigations and interviews to determine changes in the cores and obtain direct evidence of criminal conduct for presentation in court. The standard for valid data collection is the same, regardless of the overarching question. An example of such an investigation at Polecat Bay in Mobile, Alabama will be presented.