

SAN DIEGO
NATURAL
HISTORY
MUSEUM

Cerutti Mastodon Site
Author Involvement in Project

Headshot



Author

Dr. Tom Deméré, Curator of Paleontology, Director of PaleoServices, San Diego Natural History Museum

Involvement in Project

Led the PaleoServices team that discovered and prepared the fossils. Served as lead paleontologist on the research project. Corresponding author on the *Nature* paper.

Area of Study

Paleontology, systematics, geology



Dr. Steve Holen, Director of Research, Center for American Paleolithic Research; Research Associate, Department of Paleontology, San Diego Natural History Museum

Identified breakage features on bones and teeth resulting from hammerstone percussion at the Cerutti Mastodon site to determine that humans modified mastodon limb bones for marrow extraction and/or tool production. Conducted experimental elephant bone breakage experiments. Served as lead archaeologist on research project. Lead author on the *Nature* paper.

Archaeology, anthropology, comparative taphonomy, experimental archaeology



Dr. Daniel Fisher, Director and Curator, Museum of Paleontology; Claude W. Hibbard Collegiate Professor of Paleontology; Professor, Department of Earth and Environmental Sciences; Professor, Department of Ecology and Evolutionary Biology, University of Michigan

Identified individual bones of the mastodon skeleton. Contributed to analysis of bone processing and flake production. Worked with coauthor Rountrey on the creation of 3D images and animations documenting bone and rock specimens.

Paleontology, mammoths and mastodons, taphonomy (postmortem transport, chemical and physical alteration of remains)



Dr. Richard Fullagar, Professorial Research Fellow, Centre for Archaeological Science, University of Wollongong

Identified use-wear features on rocks (hammerstones, anvils, and flakes) from the Cerutti Mastodon site to determine that humans were breaking mastodon bones for marrow extraction and/or tool production.

Archaeology, tool use-wear expert

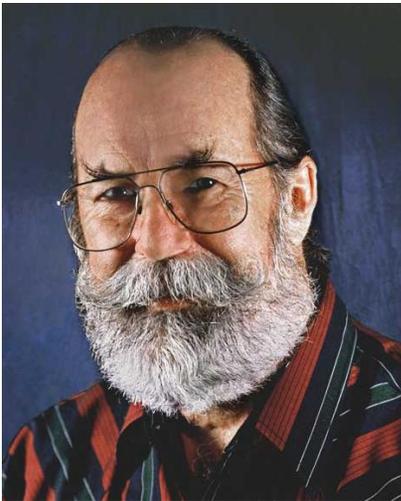
UNDER EMBARGO UNTIL WEDNESDAY, APRIL 26 AT 10 AM PDT



Dr. James Paces, Research Geologist, U.S. Geological Survey

Established suitability of specimens for the dating technique employed (U-Th radiometric techniques). Analyzed Cerutti Mastodon site specimens to determine age.

Isotope geology, geochronology



George Jefferson, Paleontologist Emeritus with the Colorado Desert District Stout Research Center, Anza-Borrego Desert State Park

Analyzed taphonomic patterns of Pleistocene mammalian fossil remains found at the site.

Vertebrate paleontology, comparative taphonomy

UNDER EMBARGO UNTIL WEDNESDAY, APRIL 26 AT 10 AM PDT



Kathleen Maule Holen M.S., M.A., Administrative Director, Center for American Paleolithic Research; Research Associate, Department of Paleontology, San Diego Natural History Museum

Helped with identification of bone impacts, flakes and bone refits. Drafted the initial versions of the *Nature* paper, compiled and wrote sections of the supplements.

Archaeology, taphonomy, experimental archaeology



Dr. Jared Beeton, Professor of Earth Science, Adams State University

Analyzed the sediment at the Cerutti Mastodon site. Determined geologic processes contributing to arrangement of fossils and stones. Identified the environment in which associated sediment was deposited.

Geomorphology, Paleoindian geoarchaeology, conservation

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Richard Cerutti, Retired
PaleoServices Field
Paleontologist, San Diego Natural
History Museum

PaleoServices field paleontologist who made the initial discovery of the mastodon fossil remains and noticed peculiar positioning of specimens. Lead excavator at the Cerutti Mastodon site. Prepared specimens from the site, and identified bone and rock refits and use-wear features.

Field paleontology



Dr. Adam Rountrey,
Research Museum Collection
Manager
Museum of Paleontology,
University of Michigan

Developed hardware and methods used for 3D digitization process. Developed web application for viewing the 3D models. Worked with coauthor Dr. Daniel Fisher on the creation of 3D images and animations of specimens.

Paleontology, 3D
digitization, 3D
rendering

UNDER EMBARGO UNTIL WEDNESDAY, APRIL 26 AT 10 AM PDT



Dr. Lawrence Vescera, Volunteer Paleontologist, California State Parks Colorado Desert District Stout Research Center in Borrego Springs

Assisted in analyzing taphonomic patterns of Pleistocene mammalian fossil remains found at the site.

Archaeology and paleontology